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# GLOBAL ELECTRONICS INFORMATION NEWSLETTER

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## ALIEN PROFESSIONALS

Most of the controversy over the now delayed Simpson-Mazzoli immigration reform act has focused on the labor market for unskilled illegal immigrants, but high-tech executives are expressing concern about a lesser known provision limiting the U.S. hiring of immigrant and migrant professional workers. Intel founder Robert Noyce told a Congressional committee that Simpson-Mazzoli would "create a drought of our most valuable resource, as detrimental to our industry's health as an extended dry spell is to growing crops. . . . Currently of all the new engineers hired by Intel directly from universities, 80 percent of the Ph.D's and 50 percent at the master's level are not U.S. citizens."

## FEW P.C. BOARD ROBOTS

Though many printed circuit board assembly subcontractors use automatic insertion equipment on repetitive, standard orders, most are sticking with human operators for non-standard stuffing operations. An official at Flextronics, a Silicon Valley PC Board subcontractor, told *Electronics News* (June 4, 1984), "I don't think the cost of robots is coming down as fast as the alternatives. . . . We don't do enough non-standard components here to

really need the robots. The non-standard segment only constitutes about 10 per cent of the total market. We just do that kind of insertion by hand." Among Flextronics' alternatives are its Singapore and Hong Kong assembly plants (see Issue No. 40).

## MATSUSHITA - PHILIPPINES

The Philippines' economic crisis has reportedly forced Precision Electronics Corporation (PEC), an affiliate of Japan's Matsushita Electric Industrial Company, to lay off half its workforce, or 600 employees.

Though government regulations permit the import of materials for the production of exports, PEC has been unable to obtain the licenses needed to produce TV sets, radios, and other home appliances. It has, however, been able to receive materials for producing batteries for export to the U.S. and capacitors for shipment to Japan. PEC is consequently operating at 40 per cent of capacity.

PEC employees are better protected than many of their Philippine contemporaries. PEC reportedly provides 25 per cent of normal salaries to furloughed workers. In addition, other Matsushita companies have contributed to a PEC worker relief fund.

## TAXES

Silicon Valley firms are lobbying hard against California legislation to eliminate the unitary method of tax collection for foreign companies operating in California. California is one of a small number of states which figure corporate income taxes by apportioning a company's taxable income according to the percentages of its sales, payroll, and property associated with its operations within the state. The method is designed to avoid arbitrary transfer pricing - that is, fudging the figures on intra-company sales to allocate income in a manner to minimize overall tax payments. Many companies complain, however, that they end up paying unfairly high taxes.

In recent years, the United Kingdom, Japan, and other major U.S. trading partners have pressured the Federal government to force the states to abandon the unitary method, calling it an unfair trading practice. This year the Reagan administration threatened new legislation to restrict states' tax powers unless they abandoned the unitary method. In addition, major Japanese firms, including many with plants in California already - such as Fujitsu and Kyocera - have threatened a capital strike. That is, unless the unitary method is repealed, they will build new plants outside the state.

With the backing of California's governor, legislation repealing the unitary method for foreign-based firms was expected to sail through the legislature, but a last-minute lobbying blitz by U.S.-based high-tech firms this August will probably slow things down enough to prevent passage in the crowded final weeks of the legislative session. U.S. firms oppose the unitary tax method, but they believe that the proposed bill will give their Japanese competitors an unfair advantage by exempting them while domestic firms still pay the higher rates.

It is likely that some repeal of the unitary tax, perhaps covering all firms, will pass in early 1985.

Meanwhile, some high-tech firms are concerned about a new provision of the Federal tax

code which was passed quietly by Congress as part of the 1984 tax act. "In essence, the law requires U.S. firms to pay a new tax on technology they transfer for use in manufacturing operations abroad." (San Jose Mercury News, August 12, 1984).

The technology transfer tax is designed to substitute for income taxes paid already by a number of major high-tech firms - including Hewlett-Packard, IBM, and Intel - which charge their foreign subsidiaries for the technology that they use. Those charges are taxed in the U.S. like any other income. The new tax would apply to those companies which transfer technology but don't use an accounting scheme that passes R & D costs on to their foreign subsidiaries.

Though some Silicon Valley companies, such as Apple and National Semiconductor, say they are considering moving some of their research and development activity outside the U.S. as a result of the tax changes, it is equally likely that they will conduct less manufacturing overseas as a result. Since differential tax costs are less important than labor costs and other locational factors, it is likely that such tax changes will affect only a few operations, where the present location is marginally more profitable.

## SILICON VALLEY GROWTH

Despite increasing congestion and soaring housing prices in Silicon Valley, employment in this high-tech Mecca is likely to keep expanding at a fast pace. The California Employment Development Department (EDD), projects that civilian Santa Clara County jobs will jump from 812,600 in December, 1983 to 899,000 in December, 1985. Though other agencies have expressed skepticism over the magnitude of the projection, EDD's Employment Data and Research office is the statistical bureau which has consistently kept the closest tabs on the Valley workforce.

EDD says the occupational groups experiencing the greatest growth will be craft,

production, and maintenance workers, with 26,000 new jobs, and professional and technical workers, with 19,000 new jobs, followed by 15,000 additional clerical workers. By industry, high-tech manufacturing (computers, electronics, instruments) should grow by 30,800 jobs, while business services (including research and development, data processing, temporary agencies, security services, janitorial services, and management consultants) should add 15,200 new positions.

EDD used 1980 census data to analyze commuting into and out of the County. In 1980, of 608,600 census respondents who said they worked in Santa Clara County, 534,980 lived in the County, for an inward commute of 12%. The totals are low because many respondents did not report their place of work. (**Area Planning Information: San Jose Metropolitan Area, 1984-1985**, Employment Data and Research, Employment Development Department, May, 1984)

## UPDATE

**Trilogy** - In Issue No. 44 we reported that Trilogy Ltd., of Silicon Valley, had canceled its mainframe computer project but was still developing a wafer-scale chip. In August the company dropped the other shoe, laying off more than 200 more employees and scrapping the wafer-scale integration project. All the company is left with are processes it developed while working on the other projects. Some of those processes, such as techniques for connecting 1,089 pins to one slice of silicon, may turn out to be valuable. (**San Jose Mercury-News**, August 27, 1984)

**Environment** - The Environmental Protection Agency is recommending that 13 Silicon Valley sites be added to the Superfund clean-up list, though that may not mean any substantive action in the near future. Hughes Aircraft, responsible for one of the nation's worst toxic solvent leaks at its Tucson electronics plant, claims in its magazine ads to have reduced the

risk of future leaks. It says, "Chemical wastes are under tight control at a new facility for making printed circuit boards for advanced missiles. The Hughes facility was planned to eliminate organic solvents, which are costly and difficult to dispose of." The City of Sunnyvale, in Silicon Valley, has sued one company, Xebec, for allegedly pouring 400 gallons of toxic compounds into the gutter this July. The target of an earlier Sunnyvale suit, parts-maker Pacific Photo Fab, has settled and plead no contest to charges of contempt of court for dumping toxic metals into city sewers. If the firm violates the settlement, the company president may go to jail. (**San Jose Mercury News**, August 21 and 22, 1984)

**IBM-Mexico** - Mexico turned down IBM's request for a waiver of Mexico's laws governing foreign investment, effectively blocking the company's plans to set up a wholly owned subsidiary to build its PC microcomputer there (see Issue No. 44). IBM's proposal was opposed by representatives of Hewlett-Packard's and Apple's Mexican joint ventures. (**San Jose Mercury News**, August 3, 1984)

**Military Chips** - Also in Issue No. 44, we reported that the Pentagon planned to stop buying chips from National Semiconductor because of past fraud in the testing of Mil-Spec circuits, but in August National and the Defense Logistics Agency reached a settlement. The chipmaker agreed to cooperate with the DLA, but it stopped short of releasing the names of low-level employees who had taken part in the fraud. (**Peninsula Times Tribune**, August 7, 1984)

## EXPORT CONTROLS

CoCom (for Coordinating Committee), the voluntary multinational agency which polices technology and product exports to the Soviet Bloc from most NATO countries and Japan, has dropped all export controls on most 8-bit and 16-bit microcomputers. It has retained, however, limits on the transfer of mainframes and super-minicomputers, certain types of complex software, large telecommunications switches, and ruggedized computers of all sizes.

Each CoCom country still retains the authority to control exports from their own plants and firms. **Aviation Week** (July 23, 1984) reports that the U.S. will decontrol eight-bit microcomputers "except those that can be networked, and 16-bit machines, except high speed ones."

## HIGH-TECH SKEPTIC

Most books on Silicon Valley and high-technology repeat the industry's well known legends of success or predict some form of computerized utopia. Negative social and economic consequences are tagged on, almost as an afterthought. Australian Ian Reinecke's **Electronic Illusions: A Skeptic's View of Our High-Tech Future** (Penguin, 1984), is a pleasant exception. Reinecke explores in detail the impact of micro-technology on the workplace and telecommunications. Unfortunately, he offers a series of concerns and complaints, not a unified analysis of the new technologies.

## ISRAEL

Nikon, the Japanese camera-maker which supplies the semiconductor industry with wafer-steppers for state-of-the-art fabrication, reportedly chose to let an American competitor win an \$8 to \$10 million order from National Semiconductor for its Haifa, Israel micro-processor factory. **Electronics News** (June 18, 1984) suggested the Nikon was unwilling to offend Arab countries.

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