

US sours on foreign graduates

Job prospects clouded by immigration bill

Washington

US high technology industries and scientific organizations are just waking up to a little-noted, devastating change in US immigration laws which, if enacted, could change the face of Silicon Valley and university engineering faculties. The proposed change would prohibit foreign students from taking jobs in the United States on graduation. Instead, they would have to go home for two years before they could apply to work in the United States.

Under present law, they may apply for a change in visa status without leaving the country, and often do so.

The new provision may well become law before Congress adjourns. Identically worded provisions are in both the House and Senate versions of the bill. Neither has yet emerged from committee, but the provisions are unlikely to change before Congress acts.

Nobody knows how many students would be affected partly because many are either in the country illegally or do not report their work status.

At Stanford, for example, 50 per cent of all students studying for a PhD degree are foreign. Nationally, in 1980, 20.4 per cent of all science and engineering graduate students were foreign. In engineering, one-third of all PhD recipients are not US citizens. Engineering is the most popular field for the 311,000 foreign students, graduate and undergraduate, estimated to be in the United States (see Table).

Civilian high technology companies have come to rely increasingly on newly qualified engineers and scientists who are not US citizens, says Pat Hubbard of the American Electronics Association, because the US defence build-up has caused defence industries to hive off many of the American graduates. William Cagney of the National Foreign Trade Council which represents 650 major companies adds: "When DuPont goes looking for a PhD in chemical engineering, it more often than not hires a foreigner; there simply aren't that many Americans to go around. These people are vital to US industry." Both trade groups are opposing the proposed change in the law, as is the Semiconductor Industry Association, representing many Silicon Valley firms.

The provision in question is Section 212 of a bill that changes the Immigration and Nationality Act, the umbrella law that governs US immigration policies. Reform of the act has long been a public issue in the

United States, where many thousands of Mexicans cross the southern border to work on ranches, illegally, and where the plight of the Cuban and Haitian refugees drew world attention to the problems of assimilating still more people from abroad. A blue-ribbon study was made by the Select Commission on Immigration, headed by Father Theodore Hesbergh of Notre Dame. The Reagan Administration proposed its own views of how to tighten US immigration laws, but the bill that has received the most support is that proposed by Romano L. Mazzoli (Democrat, Kentucky) in the House and Alan K. Simpson (Republican, Wyoming) in Senate. That part of the bill involving foreign students did not appear in Father Hesbergh's recommendations nor in the

Administration bill, and so went unnoticed until a few weeks ago.

At present, most foreign students in the United States have visas allowing them to stay as long as they are studying, but they are not allowed to work. On graduation, they may apply for permanent resident status — a step towards citizenship — if they have a job offer. They usually remain in the United States (working) until this change occurs. A minority of foreign students are in the United States on so-called J visas, having been sent by their government or on exchange programmes, and they must return home on completion of their studies. Under Section 212, all students would have the equivalent of J status.

A House staff member explained that far

Setback for Chevènement

The second constitutional airing of the prospective science and technology bill (*loi*), on which the French science boom depends, has led to a bloodbath. For the Senate, the conservative French upper house, last week voted amendments which amputate most of its effective clauses.

The law, in the tattered form approved by the Senate, will now go to the National Assembly (the lower house), probably in June. Although the government has the majority there, the law will have to go through a lengthy process in which clauses deleted by Senate are reintroduced as amendments, adding to an already packed parliamentary session.

The Senate is an indirectly elected body, a third of its members being appointed each year on the basis of regional (departmental) elections. Electors consist of mayors and other such dignitaries, and amount to some 500 from each department. The Senate remains firmly conservative despite last year's election of the socialist Mitterrand government, and so is a source of constant irritation. But this is the first time it has behaved quite as badly towards government legislation.

The government explanation is that the science and technology bill gave the opposition an excellent opportunity to put a major dent in the plans of a senior minister, Jean-Pierre Chevènement, who is also the leader of the most left-wing element of the socialist party, the Ceres group. Ceres is of an intellectual and loosely Marxist tendency, and a favourite target of the conservatives. The fact that science and technology were involved in the Senate debacle is incidental.

Chevènement wished to devolve power to the regions, setting up regional councils for science and technology with their own budgets. The senators wished to "put off" that reform.

Chevènement wanted to open up

research institutions such as the Centre National de la Recherche Scientifique (CNRS) to industry, by creating a new type of legal entity through which for example, CNRS could make profits in joint ventures. The senators would have none of it.

And, most of all, Chevènement wanted a law that would define future budgets: 17.8 per cent extra each year in real terms over the next three years. "Too imprecise" said the senators, who feel that such a broad commitment would give Chevènement too much power. In fact, the minister is now discovering that a commitment to a figure on paper — even in a parliamentary bill —

"L'ÉTAT, C'EST MA LOI"



is not a firm promise. Discussions are now going on at cabinet level for the 1983 budget, and Chevènement is having to fight as hard this year as he did last.

Chevènement was impatient with the Senate's reaction to his well-laid plans. He described the Senate majority as "reactionary" and "cut off from the people". But he now faces a long struggle against the conservatives and against those of his cabinet colleagues who resent his scientific imperialism. **Robert Walgate**

too many foreigners arrive in the United States saying they are going to study, but really plan to stay afterwards and work. This is a "backdoor immigration policy", he said, which must be reformed as part of a general tightening of US immigration.

The provision may have originated with an engineering activist, Irwin Feerst. Feerst says there was no consideration of a change in the old law regarding students, until he sent out a special issue of an independent newsletter he publishes to engineers around the country. Three hundred responses he received, he says, indicated that professional US engineers want to "throw the foreign students out". Feerst spoke to Senator Simpson and testified to this effect in December. According to Feerst, there is

Nationality of foreign students in the United States 1980-81

Regions	Selected sub-totals	Totals
Africa		38,180
Nigeria	17,350	
Europe		25,330
UK	4,440	
Greece	3,750	
FRG	3,310	
France	2,570	
Eastern Europe + USSR	1,670	
Latin America		49,810
Middle East		84,710
Iran	47,550	
Saudi Arabia	10,440	
North America		14,790
Oceania		4,180
South and East Asia		94,640
Taiwan	19,460	
Japan	13,500	
India	9,250	
		311,640

Source: Institute of International Education

no shortage of engineers in the United States, only a "cabal" of academic engineers and corporate executives who are publicizing the alleged shortage so they can hire foreign graduates at lower pay.

However, the Institute of Electrical and Electronic Engineers (IEEE), the engineers' umbrella society in the United States (where Feerst has often run as an "alternative" candidate for president) does not favour the change in Section 212 as it is now written. Richard J. Gowen, chairman of IEEE's manpower task force and a candidate for president of IEEE, says that foreign engineers are being offered jobs at salaries that may be as little as 25 per cent of the salaries paid to US-born engineers. Gowen wants the proposed Section 212 to be changed to allow only "professional" hiring of foreign graduates. That is, a foreign graduate would have to go home unless his prospective employer certifies that he will be paid at least 75 per cent of what a US citizen would be paid in the job.

So far, Congress has been mainly concerned with getting the immigration reform bill through, and seems little disposed to tinker with the minor provisions. On the other hand, organizations like IEEE are becoming very active on the issue, as they begin to realize its implications. **Deborah Shapley**

EEC budget

Windfall ahead

Brussels

An unexpected shortfall of £280 million (500 million European Currency Units) in the European Economic Community's agricultural expenditure has resulted in an extra £19.6 million (35 million ECUs) becoming available for the European Community's research programmes in 1982. The strength of the dollar, favourable prices on the world market for agricultural goods and good weather have all helped to reduce the EEC's agricultural subsidies. Most of the extra money will be allocated to the joint research centres and in particular to nuclear safety research, but around £3.7 million will go to the indirect action programmes.

The budgetary revision highlights the degree to which the European Commission's ability to meet its goal of revitalizing scientific research and development in Europe, and thus create new jobs for scientists, is linked with the long-standing quarrel over agricultural prices, the British budgetary contribution, the reform of the Community's budget and the Common Agricultural Policy and even the Falklands crisis. If an agreement could be reached on lower agricultural prices for this year, as the British are demanding, an even greater sum could be set free for other areas of expenditure. The cooperation shown by the other member states over the Falklands crisis has now made it more difficult for Britain to push for budgetary reform. But if Britain achieves its objectives in the Council meetings this week, not only will its contributions be reduced, but it should lead to greater Community outlays in other areas including research.

The Commission's preliminary draft budget for 1983 reflects the hope that the other nine member states will agree to shift the emphasis of Community spending. Thus, the text emphasizes a "significant reinforcement of financial resources for energy policy, innovation and research and development". This includes increasing expenditure on energy research by 120 per cent although the total sum for payment appropriations will still be small, at £58.4 million.

Most of the extra money for this year will go towards the Supersara project on reactor safety at the joint research centre at Ispra in Italy. An extra £4.2 million will be needed this year as the project is overshooting its budget and will probably continue doing so until 1990 to the tune of £168 million.

The entire programme for the joint research centres is, in fact, now being reviewed and some changes are certain to be reflected in the 1984-87 research programme. Under consideration is a temporary increase in staff by 161, to provide replacements for scientists expected to retire in the next few years.

Apart from streamlining research on nuclear safety, the handling of radioactive wastes and the control of fissile materials, a new institute for developing countries is planned at Ispra for training in energy planning, new energies, remote sensing techniques and the inventoring of resources. The Commission is also hoping to increase staff for research into solar energy, fusion, the rational use of energy and the study of high temperature materials.

Again, the success of these proposals will depend on the attitude of the member states, who will be influenced by the amount of money in the budget left over after provisions have been made for agricultural subsidies. **Jasper Becker**

Polish arrest

Expel and detain

The expulsion from Poland, last week, of two US diplomats and the arrest of Dr Ryszard Herczynski bodes ill for the resumption of normal academic exchanges between Poland and the West. The two diplomats, Scientific Attaché John William Zerolis and First Secretary for Cultural Affairs, James Daniel Howard, found in Dr Herczynski's flat, were accused by the Polish ministry of foreign affairs of "pursuing activity conflicting with their diplomatic status". Their presence in the flat appears, however, to have been entirely in the line of duty; they had gone there to confer with Dr Herczynski and with Professor Wladyslaw Fiszdon, a former pro-rector of Warsaw University, on the forthcoming joint US-Polish symposium on fluid mechanics.

Dr Herczynski, a mathematician specializing in fluid dynamics, is employed at the Polish Academy of Sciences' Institute for Fundamental Problems of Technology. Although now accused of having been "one of the inspirers of activity contrary to our *raison d'être* in the scientific milieu", he has never been associated with the dissident movement. In autumn 1980, however, he founded the "Society of the friends of science" — a semi-popular organization based on the then current principles of the liberalization of learning.

It was presumably for this reason that, during the night of 12-13 December 1981, he was taken into custody and interned for some two weeks. Although the authorities now claim that before being released, he signed an undertaking to cease such activities, Dr Herczynski's friends insist that not only did he never sign such an undertaking, but that at the time of his release there had been no mention of any such document.

The arrest of Dr Herczynski was, according to official sources, effected as he handed Mr Zerolis a packet of material "damaging to the interests of the Polish People's Republic", apparently com-