biggest American companies with a very fast, glossy, satellite-based service which will handle voice and data traffic as well as fascimile and full-colour teleconferencing. SBS's headaches are, first, too few customers (about nine so far) for a service with a subscription of \$108,000 per month. Second, technical problems with the space shuttle, which was meant to launch the satellites.

SBS is working hard to tackle these problems. One reason for the high cost of the service is that each user would have a satellite communications dish costing around \$250,000. Cheaper alternatives are now being considered—eg, microwave links to shared satellite earth stations. A joint venture between Aetna and Macom—the microwave specialist that acted as consultant to Xerox on X-ten—is believed to be exploring this.

SBS intends to keep its original satellite launch programme despite the problems with the space shuttle. It will use rockets instead to launch its first satellite this autumn, and another next spring. Then SBS will have to get to grips with its marketing problems. The company feels it will reach breakeven in 1983 on sales of \$150m-200m.

SBS this week announced plans to use its satellites and a network of 20 satellite earth stations to start a nationwide, cutrate telephone service aimed at both large and small users, in 1982. The new telephone service will undercut AT&T by 10-30% on direct-dialled long-distance calls.

### **West Germany**

# Lock 'em out—but not at every gate

BONI

The West German trade unions' struggle to deprive employers of their most potent weapon—the lock-out—lost another legal battle this week, but the unions came away with a few of the spoils. The federal labour court in Kassel ruled on Tuesday that employers may in principle impose a lock-out to counter a strike—a confirmation of two previous decisions in 1955 and 1971. But this time the court has felt it necessary to make the weapon a bit less

A lock-out may not be imposed before a strike actually takes place, nor must it be directed solely against trade union members. It must be confined to the wage negotiating area in which the dispute arises. And the extent of the lock-out must bear a reasonable relationship to the extent of the strike. The court ruled, for instance, that if a strike is

limited to not more than 25% of the union membership in a wage negotiating area, the lock-out should involve only a similar proportion of workers.

These are not simply theoretical considerations. Lock-outs are common in West Germany's less-than-common industrial confrontations. In the big disputes of 1963, 1971, 1976 and 1978, more workers were locked out than were on strike. In 1978 the printing union, IG Druck, called out 2,200 workers in five newspaper plants after talks had broken down over the introduction of new technology. The employers' response was to lock out 32,000 workers in 500 firms throughout the country. Under the court's new ruling, that was certainly overdoing it.

IG Druck, brought to the verge of financial ruin by the lock-out, teamed up with the engineering union, IG Metall, to attempt to get the court to abolish the lock-out once and for all. IG Metall complained that a strike of 85,000 of its members in south-west Germany in 1978 was answered by a lock-out of 145,000 workers. Its case was rejected—so employers now know how far they can go.

#### **Russian sanctions**

# Bite worse than the bark

Western sanctions could bite harder on Russia than on Iran because America depends less on its allies to make them bite. Other countries—with big exceptions like Argentina—have promised not to sell Russia goods American companies have been forbidden to export. That is not worth much; big new credit lines for the Soviet Union are being arranged in Europe. But the United States is squeezing where the Soviet economy is weakest: high technology and food. So sanctions may eventually sting Russia's hardpressed planners a lot more than now

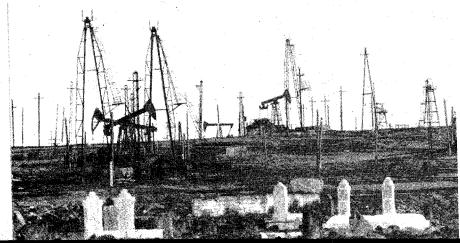
seems apparent.

Before trade restrictions were announced by President Carter in January, the American commerce department expected American exports to Russia in 1980 to reach \$4.8 billion, \$3.9 billion of that in agricultural exports. That forecast has been cut to only \$1.5 billion, including \$1.1 billion-worth of agricultural products. Exports of high-technology goods, originally estimated at \$200m, are expected to fall to \$50m.

The biggest contract to get the chop was Occidental's \$20 billion agreement to supply fertiliser in exchange for Russian ammonia (but the Russians will keep their side of the bargain). Other losers are Armco, which had a \$100m deal for an electric steel mill near Moscow. Nippon Steel missed business worth \$250m on that contract. Alcoa was negotiating to sell technology for an aluminium smelter in Siberia, worth \$100m, and now frozen. IBM and Control Data have lost a number of contracts, including one to supply spare computer parts for the Kama River truck plant, where Ingersoll Rand also lost a \$9m order for an assembly line. NBC is the biggest casualty of the Olympic boycott. It had expected to earn \$165m from televising the games, after paying \$87m for (and insuring) the television rights. IBM had already supplied computers for the Olympics, but the supply of software is blocked.

America has been selective in its ban on energy-related exports, halting trade only where American technology is very difficult to replace: drill bits, submersible pumps, pipeline compressors, and seismic data processing. Dresser Industries has been refused permission to supply oil equipment (mainly high-speed drill bits) worth \$144m. Armco, however, got an export licence to supply a jack-up drilling rig worth \$5m to Japan's Mitsui Modec for oil exploration off the Russian island of Sakhalin. McDermott and Brown and Root were allowed to compete for a \$118m oil rig construction deal, but it was won by a French consortium.

Keeping Russia's oil hopes out of the graveyard



# The electronic office is temporarily on hold

The office of the future is having to tackle a few all-too-common problems of the present: delayed technology, managerial over-optimism, regulatory undergrowth. The problems of America's planned "office telecommunications networks" are the latest example. The systems will eventually permit high-speed communication between different types of widely-dispersed equipment (eg, facsimile machines, copiers and word processors), all talking a Babel of different electronic languages. Some of the networks are intended to transmit speech and pictures (both stills and video) as well.

Three rival services claimed, until late 1979, that they would all be working by 1981, before most people had even heard of them. Would-be transcontinental doodlers should not cash in their postage stamps: it is now clear that the most important networks will not only miss their start-up deadlines, but also differ greatly from their original blueprints.

Most problem-struck is AT&T's Advanced Communications Service (ACS)—the service originally aimed at the broadest possible range of users, small companies as well as large. By introducing minicomputers at the connection points of its existing digital, inter-city networks, AT&T hoped to allow 450 different types of terminals to communicate with one another. Late last year, it admitted that ACS had run into severe software problems. The programmes to make the necessary speed and code conversions had proved more complex then expected. The launch date has now been postponed indefinitely-until AT&T gets its software sorted out.

Early this year came a new uncertainty. Because a 1956 justice department consent decree forbade AT&T from entering unregulated markets such as data processing, the telephone company used the increasingly blurred distinction between data processing and telecommunications to make ACS look as much like communications and as little like data-handling as possible. Even so, the decree has hampered Ma Bell's ability to exploit the

full range of commercial opportunities.

All this appeared to change in April, when the Federal Communications Commission (FCC) issued a ruling that seemed to let AT&T off the hook. If the FCC ruling stood up in the courts, AT&T would be free to restructure ACS and use it to get into the most lucrative data processing businesses, eg, home or office viewdata information retrieval systems, econometric modelling, etc. Unfortunately, in the absence of legislation by congress, the legality of the FCC's ruling is open to question.

AT&T would like to redesign ACS to take advantage of new opportunities in data processing, but it is not sure that it can. If the necessary legislation is passed, AT&T may be allowed to get into data processing-but perhaps on condition that it does not actually indulge in it for a number of years. Anyway, it will still have to solve its software problems, however long that takes. And perhaps technological change since AT&T's original application may lead it to redesign the network's hardware too. Some experts now believe it could be 1984 before AT&T is able to offer ACS to the wide market at which it was originally aimedalthough a very specialised service designed for a limited number of large users could be offered in two years' time.

Almost equally uncertain is the future of Xerox's X-ten, a nationwide message

system based on satellite and microwave links (the latter on the ground)—which was also intended to permit teleconferencing, document processing and distribution. Xerox saw this network as a key element in its attempt to dominate office-of-the-future technology. But, as a document recently circulated inside the company puts it:

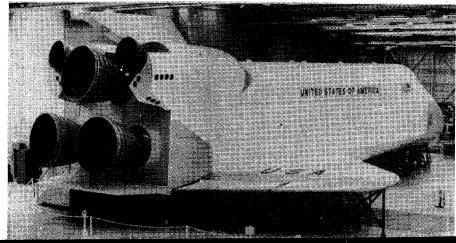
The technical and related economic problems now look much more difficult than we envisaged. Our decision will not necessarily be go or no go or black or white. We may decide to go ahead with the original concept, or modify it, or get into a network of a different sort

Many other companies' experts thought from the start that the X-ten scheme might prove too ambitious for Xerox. After acquiring Western Union International a few months ago, Xerox handed the project over to its new subsidiary. The project was shifted from California to Jericho on Long Island. The move was so unpopular with the 120-man development team that most of it resigned.

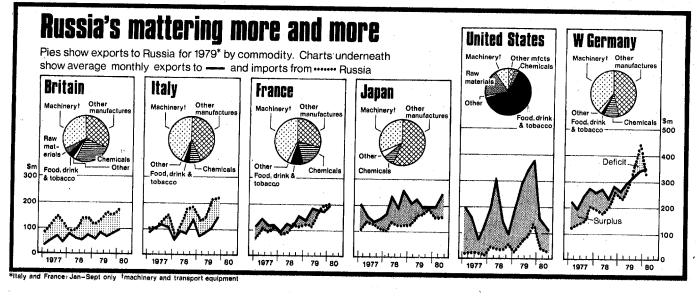
In despair, Xerox is now plugging Ethernet—a local communications system based on coaxial cables, centred on individual buildings. Ethernet systems might later be connected to each other by a modified version of X-ten in some cities. Ethernets could also plug into and operate over cable television systems in cities (like New York) where these are highly developed.

The network that now looks likely to succeed soonest is run by Satellite Business Systems, jointly owned by IBM, Comsat General and Aetna Life Insurance. It has some bugs too. SBS is the Rolls-Royce of network services. It intends to provide a select group of the

Slow ride for SBS on the space shuttle



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President Carter has also tried to widen the list of goods exported to Russia which must first be cleared by Cocom, the Nato group (plus France and Japan) which watches sensitive exports to communist countries. In March, America sent Cocom a long, secret list of proposals for tightening trade restrictions on, eg, data processing technology and knowhow related to oil and gas development.

America's allies—especially West Germany—would not be happy to put energy technology on a new Cocom list, so it will take several months to work out a common policy. West Germany has just signed a 25-year trade agreement with Russia which includes co-operation on energy exploration.

European governments have been reluctant to cut off credit to the Soviet Union. The French have agreed to open a new cheap credit line—originally estimated at \$1 billion—and terms are being negotiated with the Soviet foreign trade bank. The Bank of Italy confirms that a new \$1 billion facility has been agreed between Russia and Italy, although the foreign ministry in Rome denies it, pointing out that Montedison's \$1.5 billion chemical collaboration agreement with Russia has been delayed for lack of official credit. Japan's Export-Import Bank, however, has held up new coal and

timber projects planned in Siberia, worth \$850m, by refusing to talk about the necessary \$500m in soft loans.

America's embargo on sales of 17m tonnes of grain which Russia wanted this year in addition to the 8m tonnes it will get under long-term contract also seems full of holes. Contracts for 14m tonnes were scrapped, and the EEC, Canada and Australia said they would not help the Russians out. But Argentina, the second largest exporter of feed grains in the world, has sold them a large amount. and Switzerland's grain market has been an important channel for shipments to Russia. The supply of maize and wheat to eastern Europe has increased sharply, some of it on the way to Russia. One grain expert in Chicago reckons that Russia has been able to buy all it wants.

Next year, the Americans say, the grain embargo should bite harder. Russia is expected to need around 28m tonnes of grain imports in the July, 1980-June, 1981 crop year. One analyst suggests that the Russians would like to buy 10m tonnes of that from the United States, on top of the maximum 8m tonnes they will get anyway under their long-term grain pact with America. Russian traders have already started arranging grain contracts for 1980-81. But Muscovites will probably have to queue even longer for their meat.

book publishers sent their wares to the shops with a recommended retail price, within margins set by the government, began cracking when the up-market discount chain FNAC started selling books below the recommended level in the mid-1970s. Department stores with aggressive pricing policies also moved into bookselling, previously the domain of 3,000 specialised bookshops and legions of newsagents.

Price controls at the publishing end of the business were lifted in 1978. Last July the economics minister, Mr René Monory, told publishers they must abandon recommended prices too. Individual bookshops had to be allowed to sell at any price they chose.

At first retailers liked the idea. But since the switch, total book sales have lagged behind inflation. Only department stores, with their strong marketing emphasis on best-sellers, have profited dramatically from price freedom. Many individual bookshops have fared badly, and book publishers fear they will close down. In a recent poll of the retail trade, four out of five ordinary bookshops plumped for a return to an organised price system. The bulk of the big stores, which still have a minority share of the market, like things as they are.

France's 400 publishers, led by Hachette, Gallimard, Presse de la Cité and other large houses, now predict a nasty squeeze. They fear it will be increasingly tough to move what they call "difficult" books, eg, first works by authors, scientific or scholarly books. And they will not be able to use plump margins on best sellers to subsidise more worthy, less popular books.

Alas for the publishers: there are no signs that Mr Monory's literary interests have begun to outweigh his concern about building a free-trading economy.

## French publishing

## Irksome freedom

PAF

The lifting of price controls in France has been welcomed by virtually all branches of industry with one notable exception: the book business. It wants a tighter, not a looser, price regime.

The old system under which French

Raw materials 12·8% (incl. gold and diamonds)

Other manufactures 9·5% 
Machinery & transport eqpmt. 5·6% 
Chemicals 2·2% 
Other 4·4%

Russia's exports to developed

countries, 1978

Fuels 65.5% --

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#### Video discs

# The plot thickens

General Electric's agreement to go into the video-disc market with Japan Victor Company (JVC), Thorn EMI and Matsushita has shortened the odds that JVC's technology will dominate this emerging market. General Electric is number three in sales of colour televisions in the United States, and its participation will give the consortium some much-needed marketing muscle.

The four partners will set up three joint ventures in America to prepare their offensive in late 1981: one (General Electric, Matsushita and JVC) will make disc players, and the other two (all four companies) will produce discs and programmes. Marketing of the discs and disc players will be managed by the individual companies.

Even with General Electric on board, however, the new group still lacks the selling power behind RCA's rival videodisc player, which, according to the American trade newsletter, Television Digest, will be backed by a retail network holding 43% of the American colour television market (one half through RCA, the other through its licensee Zenith). The companies in the JVC consortium can muster only 15% of that market. And Philips, which is backing a third video-disc technology with Japan's Pioneer Electronics Corporation, has a still lower 7% share through its Magnavox subsidiary.

Many analysts say that Matsushita only got its powerful grip on the American video-cassette player market through its retailing arrangement with RCA. Will RCA's sales network now tip the videodisc scales too? If the market takes off fast, RCA could build up an unbeatable early lead. Its system is a lot cheaper than the Philips/Pioneer disc player (under \$500, versus \$750) and may well cost less than the JVC technology, which has yet to be priced. More important, RCA has so far been more aggressive than its two competitors in signing up feature films, music shows and other programmes for its discs.

But the expected entry of JVC's disc player could well keep sales in America in 1981 around the lower end of the forecast range of 50,000-350,000. Faced with incompatible systems, consumers may not buy for fear of making the wrong choice. Most film and television production companies will not tie themselves to one system until they see which sells best. The choice of programmes will probably prove the key to customer preference, so the video-disc companies will have to

scramble to build up a lead in programmes, as well as conducting a more orthodox battle to win disc player sales on price and technology.

Once a three-way fight starts in earnest, RCA's chances will look less good. Choosier consumers might plump for JVC's higher technology. Pioneer and Philips would have a better chance too, provided they can cut the cost of their even more technologically advanced laser system.

## Shipping

# Trustbusters take to sea again

America's antitrust men are fishing again in the troubled waters of international shipping. On June 6th, the justice department demanded documents from the American offices of seven shipping lines (six of them foreign-owned) which control almost all the container trade between America and Australia and New Zealand. Two weeks earlier, similar demands had been sent to the six shipping conferences to which the lines belong.

Shippers fear that the investigation could turn out to be as big as the justice department's North Atlantic probe, which began in just the same way in the mid-1970s and is still dragging expensively through the courts. Foreign governments are furious that their protests in the first investigation failed to forestall the second. Most countries allow shippers to operate as cartels, provided they obey certain rules, in order to assure stable prices and reliable service-or so governments say. The United States does the same, although with different rules. But foreign governments hate the way Americans have intervened unilaterally to punish behaviour which is legal elsewhere.

Feelings are running high over the new investigation because the justice department is taking on the regulatory agencies of foreign governments, and not just commercial shipping lines. Trade on Australian and New Zealand routes is closely regulated by Australia's meat and livestock corporation and New Zealand's wool board which select what kinds of ships can carry these products.

Australia is demanding consultation and asking that the charges (group boycotts, reciprocal dealing, predatory pricing from 1972 onwards) be made more specific. New Zealand is expected to follow suit. Britain, informed on May 28th that the justice department was to ask for documents from two British companies (Acta, owned by a consortium including Cunard, and Bank and Savill, owned by Andrew Weir and Furness, Withy), demanded consultation too, and pointed out that Britain's new Protection of Trading Interests Act, as yet unused, directs British courts not to enforce some American antitrust judgments. West Germany (on behalf of the Columbus Line) and Sweden (for Rederi AB Transatlantic and Atlanttraffik Express Service) are also angry.

The Australasian shipping route is important. Although only about 1.5m tonnes of cargo are shipped by containers on the route—compared with almost five times that much on the North Atlantic, according to America's Federal Maritime Administration—the run is long and lucrative. Britain, for example, although it only carries other nations' trade on the route, earns four times as much on it (about £56m in 1979) as from direct trade between Europe and North America, on Britain's trade department's estimates.

Nobody is quite sure what sparked off the trustbusters' investigation, but decisions by Australian and New Zealand agencies about who carries what have been controversial. An Australian bulk

## Key indicators: Commodity prices

#### Wool roundup

World wool production in the 1979-80 season, just ending, was an estimated 2.7 billion kilos, the highest for eight years. New Zealand output was a record 353m kilos. In the first eight months of the season Russia ousted Britain as New Zealand's biggest customer—taking 40% more wool than in the same period of 1978-79. The outlook for next season is less promising: orders are falling.

1975=100 Dollar ind		June 10	% cha on month	nge the year
All items Food Industrial	210.0* 230.9	207.6* 228.0*		+14.1 +20.4
All Fibres Metals	173.5* 168.8* 168.0	171.7* 166.6* 163.9	-1.2 -0.8 -1.8	+1.1 +13.6 +1.5
Sterling in All items Food Industrial All Fibres Metals	162.8* 162.0	197.7* 217.1* 163.5* 158.7* 156.1	-5.0 -5.7 -3.4 -3.1 -4.0	+2.3 +8.0 -9.4 +1.9 -9.0
*Provisional				

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