US/Soviet science summit parlay in new spirit

● Upbeat mood prevails in Washington
● Economic changes forecast

Washington

THE optimism and enthusiasm at last week's summit meeting here between General-Secretary Mikhail Gorbachev and President Ronald Reagan spilled over into science during a nearly simultaneous meeting between members of the Soviet and US academies of science.

Frank Press, president of the US academy, described the meeting as an object lesson in *glasnost*. "The Americans who attended the meeting had all read about *glasnost* ", said Press. "But that did not prepare us for what we encountered."

The gathering at National Academy of Sciences headquarters across the street from the State Department was billed as a meeting on issues of science, technology and economic development. Some three dozen American and one dozen Soviet scientists, economists and corporate executives sat around a large table, as translators struggled to keep pace with the often animated discussion.

Economic issues dominated the meeting. Abel Aganbegyan, secretary of the economics department of the Soviet academy, described the changes as a shift from extensive to intensive development. In practical terms, this will mean spending more money on factory machinery, less on new buildings. It will also mean giving more freedom to individual enterprises to chart their own course, taking a cue from the demands of their customers. Prices for goods will be allowed to fluctuate in response to demand. The stratified and centralized agencies that make economic decisions will be made smaller and more responsive to local needs.

But with *perestroika* — the reconstruction phase that follows *glasnost* — there will also be upheaval. Restructuring entrenched bureaucracies will mean constant political battles. Installing new technology inevitably means a delay in production until the new machinery is brought on line.

The Soviet delegation was headed by Yevgeniy Velikhov, vice-president of the Soviet academy, who sounded a familiar theme at the start of the meeting: the need for bringing scientific and technological achievements to industry. He also spoke of education reform. At the university level, there will be academic chairs at research facilities so that teaching can go on at places traditionally reserved for research only. Likewise, Velikhov says more money will be spent on basic research at universities.

At the high-school level, the Soviet Union plans to have one million Soviet-built personal computers in the classroom by 1992. That forecast brought a warning from John Scully, chief executive officer of Apple Computers, who told Velikhov that scaling up production of computers places tremendous demands on quality control. He also predicted that hardware development would continue to proceed rapidly, ultimately leading to desk-top supercomputing within the decade. Scully urged Velikhov to steer Soviet participation in computers in the direction of software development to anticipate the demands of the new hardware.

The meeting yielded no concrete proposals. Roald Sagdeev, director of the Soviet Space Research Institute, described the need for developing standards for data exchange as international activities begin on the international geosphere/biosphere programme. US Environmental Protection Agency administrator Lee Thomas urged the Soviet Union to support the recently concluded agreement on controls on chlorofluorocarbons to protect atmospheric ozone. A discussion on AIDS was postponed when the Soviet delegation had to leave for the White House to attend the signing ceremony for the intermediate nuclear force treaty.

Despite the lack of substantive exchanges, the mood was clearly different from previous US/Soviet discussions. "The evasiveness and rehearsed responses of the past were gone, replaced for the most part by openness and frankness", said Press. But if openness characterized most of the meeting, such was not the case for the issue of human rights. Vladimir Kudryavtsev, director of the Institute of State and Law described claims of large numbers of potential Jewish emigrés as "fantastical propaganda".

The decorum of the meeting broke down only when an aide to Press informed him that Raisa Gorbachev would soon be outside, to see the bust of Albert Einstein in front of the building. A mass exodus from the room ensued, on the strength of what turned out to be a false alarm, and the meeting resumed. There was a second exodus when the aide reappeared, but Mrs. Gorbachev never left her limousine. In the uncertainty, it fell to Sagdeev to propose the obvious; continue the meeting.

Joseph Palca

All systems go for star wars despite summit

Washington

JUST a few days after the end of his summit meeting with Soviet leader Mikhail Gorbachev, US President Ronald Reagan has reiterated his determination to continue with the Strategic Defense Initiative (SDI). In a weekend radio address, he described the building of a nuclear missile defence as a "moral imperative" and insisted that he would not give up his plans in order to achieve the 50 per cent cut in nuclear forces aimed for in the Strategic Arms Reduction Talks (START).

Disagreements between the two sides over SDI continued until the last minutes of the summit and the final compromise statement achieved little of what the Soviets had wanted. They had proposed that SDI testing be limited by the Anti-Ballistic Missile (ABM) Treaty as "signed and ratified", the word "ratified" implying that the view of the US Senate, that testing in space of a missile defence system would violate the treaty, must be upheld. But "ratified" was removed after US protests, leaving Reagan free to fight for his non-restrictive view of the treaty.

Despite continuing Soviet condemnation of SDI, there were hints that the problem would be put aside to allow progress in the START negotiations.

Although the two sides agreed to reduce their nuclear arsenals to 4,900 ballistic missile warheads each, the sub-limits on the different warheads remain unclear, as do restrictions on sea-launched cruise missiles and the new multiple-warhead missiles on US Trident submarines.

Not everything went the US administration's way over SDI. The White House wanted a statement allowing the United States to withdraw from the ABM treaty if it became necessary to do so in order to carry out testing of SDI in space. But the final communique denied permission to withdraw from the treaty.

In the short term, Congress seems more likely to inhibit the development of anti-missile systems than does Soviet opposition. In the defence authorization bill, agreement has been reached on a total budget of $3,900 million for SDI research, $2,000 million less than the White House wanted and only 11 per cent more than last year. But attempts to force Congress's narrow interpretation of the ABM Treaty on President Reagan by including restrictions in the authorization bill were not wholly succesful. The final version prevents any immediate tests that are inconsistent with the narrow interpretation of the treaty, but does not prevent planning for tests in later years.

Alun Anderson