

Venus

Soviet probes make soft landing

THE first part of the Soviet Veba (Venus-Halley) mission, the descent of atmospheric and surface probes to Venus, has been a success, according to Dr Vladimir Kotel'nikov, first vice-president of the Soviet Academy of Sciences. Indeed, in good Soviet style, the Veba-2 surface probe, which included a rock-gathering minidrill and spectrometer analysis chamber, overfulfilled its norm, working and transmitting data for 22 minutes and 17 seconds rather than for the expected 14 minutes. "Express analysis" of incoming data, moreover, revealed a number of new results, both confirming previous postulates and producing various surprises.

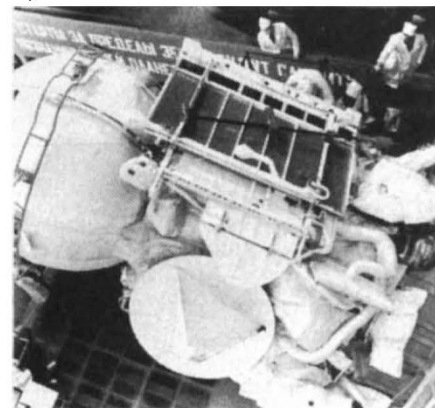
The Veba-2 descent module, which landed in the Rusalka plain (6°27' S. latitude, 181°5', longitude), has revealed the presence at that point of soft sandy soil. Previous missions had revealed a more rocky terrain and, although several planetary podologists had postulated that more friable soil might be encountered, this is the first direct evidence of them. Similarly, the two drifting aerostatic probes (carried by helium balloons) directly confirmed the presence of large quantities of sulphuric acid in the venusian clouds. These two probes drifted around the planet's equator for a quarter of its circumference, with a translation velocity of 60 to 70 metres a second. Surprisingly, the balloons encountered updraughts and

downdraughts of up to 1 m a second, which hurled them up and down by 200 to 300 m. The drift data from the probes, which were tracked by radio telescopes at Medvezh'i Ozera and Ussriisk in the Soviet Union, Pentikton (Canada), Fort Davis (United States), Madrid, and Parkes (Australia), will be processed in conjunction with the CNES centre at Toulouse. Full results are not expected before the beginning of 1987. At the press conference at the Space Exploration Institute of the Soviet Academy of Sciences last week, speakers stressed that even the initial data "leave no doubt" of the "powerful circulation" in the venusian atmosphere.

This press conference and the approach of the Soviet media in general to this, the first major space event of the Gorbachev era, is instructive. TASS reported the mission without its well-worn formula that this research was carried out in accordance with the directives of the 22nd Party Congress on the application of space to the national economy, which suggests a deliberate effort to take the public into the scientists' confidence.

One radio transmission at 16.30 Moscow time on 15 June took the form of a report from the flight control centre, suggesting that it was happening in real time. An interview with Dr Valerii Barsukov,

director of the Vernadskii Institute of Geochemistry and Analytical Chemistry, on volcanism on Venus was "interrupted" by an announcement that Veba-2 had landed. The effect may have been spoiled for discerning listeners by the fact that shorter and less dramatic announcements of the Veba-2 landing earlier that day had also been given out on radio in real time style.



The Veba-2 surface probe.

For the rest, the official spokesmen have stressed the international aspects of the mission. France has participated in providing the apparatus for the aerostatic probes and landing craft, while the Halley's comet part of the mission will involve equipment from "a large number of both socialist and capitalist countries".

Vera Rich

New observatory

THE site of the new international observatory on La Palma, in the Canary Islands, which is to be inaugurated by King Juan Carlos of Spain on 29 June. From left to right the partially constructed dome of the 4.2-metre William Herschel telescope, the

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Swedish Solar Tower, the 2.5-metre Isaac Newton telescope, and the 1-metre Jacobus Kapteyn telescopes. Also at the ceremony will be six other heads of state (or their representatives). The participating nations are Spain, the United Kingdom, Denmark, Sweden, the Netherlands and the Irish Republic. (Photograph courtesy of the Science and Engineering Research Council.) □

CERN

Schopper's views on Kendrew

REACTIONS last week to the Kendrew report on the future of British participation at CERN, the European Organization for Nuclear Research (see *Nature* 20 June, p.619), at least from particle physicists in Britain and Europe, are most diplomatically described as a blend of acute scepticism and puzzlement. The scepticism is that a combination of broader international membership and a reduced budget could possibly lead to a 25 per cent reduction in the cost of CERN by the deadline set for 1991, and puzzlement that somebody with Sir John Kendrew's experience of running the European Molecular Biology Laboratory at Heidelberg could ever have thought his panel's recommendations practicable.

Professor Herwig Schopper, the director-general of CERN, while saying he was glad that the report was very positive about the science and management of CERN, emphasized the implications of the recommendations. "Increased membership is not a new idea; some international collaborations have associate members linked to only parts of their programmes, but we have only one major programme [the construction of the electron-positron collider LEP]. Wider membership is a possibility for the future".

A major hindrance to widening CERN's membership in the near future, it seems, is that countries such as Japan and Canada (mentioned by Kendrew last week as possible candidates) would not be attracted by LEP given the advanced state of its development. Looking much further ahead, however, the proposed construction of the Large Hadron Collider in the LEP tunnel would necessitate a significant increase in CERN's budget, and that project could attract a wider membership.

The proposed cut in the cost of CERN of 25 per cent by 1991 would, in the circumstances, have to come from reduced contributions from the member states. Schopper points out that about half of the budget goes on salaries. "CERN's council could decide on lower salaries for new arrivals, but current recruitment rates are low. A decision to reduce existing salaries could result in our being taken to court." So, Schopper says, a 25 per cent cut in CERN's budget would have to come almost entirely from the materials budget, and would effectively emasculate CERN. There is no sign, moreover, that other member states would approve a significant budget cut. "This seems to be a special British problem", said Schopper.

Philip Campbell