

measures" is less marked (58.5 thousand million rubles, as opposed to 56.0 thousand million in 1970). This represents a rate of growth smaller than that of the total budget, and in the sub-division "education, science and culture", the increase in absolute figures from 24.7 to 25.8 thousand million rubles represents, in effect, a relative decrease from 16.2 per cent to 16 per cent. Similarly, the increase in spending on public health and the medical services (from 9.2 to 9.3 thousand million rubles) represents a decrease from 6.0 per cent to 5.7 per cent of the total.

The defence budget, which remains unchanged at 17.9 thousand million rubles, has undergone a relative decline from 11.8 per cent to 11.2 per cent of the total budget. This represents the smallest percentage expenditure on defence for the last ten years, a factor, no doubt, which was in the mind of the Soviet Minister of Finance, V. F. Garbuzov, who greeted this budget as one of "peaceful economic and cultural development".

The budget must, of course, be considered in connexion with the state plan for 1971, simultaneously adopted with the budget. The plan, constituting the first part of the new five-year plan for 1971-75, envisaged an increase of 6.9 per cent in industrial output, 7.3 per cent in the generation of electricity, and large increases in oil and natural gas production. The section of the plan relating to the "development of science and technology" speaks chiefly of industrial production, with the emphasis on automation, mechanization and data processing.

POLLUTION

Defence Ministry Pays Up

AFTER five years of wrangling, the Freshwater Biological Association (FBA) has finally won its battle with the Ministry of Defence for compensation arising out of a pollution incident in July 1965. The association has accepted a settlement out of court for £5,000 as compensation for the loss of almost the entire fish population of the River Frome together with the research time wasted, and the biological information lost when experiments were ruined.

The incident seems to have been both isolated and unusual. Paint stripper used in large quantities for cleaning purposes at Bovington Camp, Dorset, was usually dumped on waste land. But an unexpected and heavy rain storm in July 1965 washed much of the chemical into a small stream which fed directly into the River Frome. The effect on the total fish population was devastating, but in some ways the FBA was most severely hit, for experiments which had taken many months to prepare were ruined. The work of the River Laboratory at East Stoke near Wareham was set back by almost 18 months. In one case, a study of the seasonal changes which occur in the bottom fauna of a mill stream which had been in progress for nine months was destroyed. Another experiment to test the effect of population density on the survival of species of trout had to be abandoned while only half completed.

Other fish owners, including the Avon and Dorset River Authority, whose stocks were destroyed by the pollution, have been compensated by the Ministry of Defence, but the sums paid have not yet been revealed. Regardless of the amount of compensation paid, it seems unlikely that the cost of the damage will be

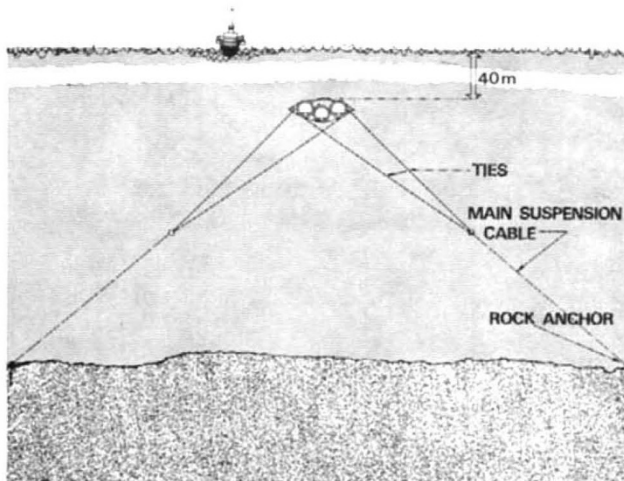
recovered. Two years ago, the report of the Council of the FBA noted that a writ for damages claiming nearly £31,000 had been issued, yet the association has in the end settled for compensation totalling less than one sixth of that sum. A spokesman for the Ministry of Defence said earlier this week that steps had been taken at Bovington to ensure that the pollution would not be repeated.

TRANSPORT

Pipe Dreams

A BRITISH design for an "underwater bridge" has recently acquitted itself well in a competition organized by the Italian government to find a good way of spanning the Straits of Messina between Sicily and the mainland. A consortium headed by Alan Grant and Partners, a firm of consulting engineers, has carried off one of the six first prizes of £10,000 for their work on what is essentially a floating tunnel comprised of three large concrete and steel pipes anchored by cables to the seabed. A total of 144 design submissions, chiefly of a conventional nature, were received.

The Grant consortium's proposal is that sections about 50-70 m long and weighing between 50,000 and 100,000 tons should be constructed in a dry dock and later sunk, joined together and filled with air. In this way the whole structure can be made buoyant and need only be anchored with suitable regard for the prevailing currents. The three large pipes, about 12 m in diameter, would carry two road carriageways and a railway. The company expects that the whole structure would be secured about 40 m below the surface of the sea in the Straits, which are about 3 km wide.



A deep anchorage for the underwater bridge.

It has also been suggested that the underwater bridge might be a viable alternative to the twin railway tunnel scheme which the Channel Tunnel Study Group submitted to the British and French governments last July. This group includes the Channel Tunnel Companies founded in Britain and France towards the end of the last century together with several British, French and American merchant banks and investment companies. It is an amalgamation of three rival groups whose separate proposals were rejected by the