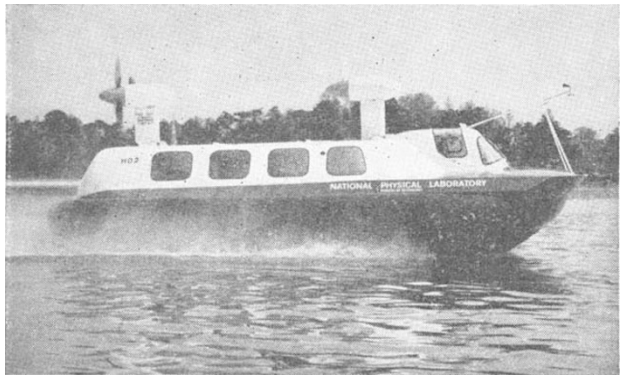
industrial or commercial experience. But at least the unit is not to move to the NPL headquarters at Teddington in the near future—this would almost certainly be a mistake. It is true, of course, that the NPL Ship Division is nearby at Feltham, but there is not much sense in that either—Feltham is miles from a major centre of either shipping or of shipbuilding. To move the hovercraft unit to Feltham so that it could merge more closely with the ship division would be merely to pile one illogicality on another.

The hovercraft unit still operates from Hythe, on Southampton Water. The work it does is hardly pure research, but it is some way from direct commercial application. At present, studies are in progress on controllability and manoeuvrability and on improving fan propulsion systems. One of the principal research vessels, the HD 2 (see picture), contains innovations which make it, the unit says, the most controllable hovercraft in existence. This does not prevent it from travelling crabwise in a strong wind, but does enable it to do things like rotating rapidly on its own axis, or nosing up close to piers or to other vessels steaming along at full speed. The amount of spray produced is also a good deal less than earlier hovercraft, though it is not negligible.

The principal control system on the HD 2 is provided by two propellers, fore and aft, which can be swivelled through $\pm 35°$. Naturally they are not quiet, but efforts have been made to reduce the noise level,



The HD 2 hovercraft.

and they are said to have been successful. The HD 2 also has what are called "puff ports" in the main material of the cushion. As their name suggests, these consist simply of holes which can be opened or closed to supply a sideways component to the vessel. There are four ports in the skirt loop, positioned at the ends of the straight side sections. If two on the same side are opened, the effect is to cause, or more likely correct, a sideways drift. If diagonally opposed ports are opened, the effect is to prevent the craft from yawing, that is pointing in a direction different to that in which it is travelling. To judge by the performance of the craft, the ports are not yet fully effective.

The final control system involves shifting the skirt, either sideways or fore and aft. The side sections of the skirt are connected by steel wires to a drive in the centre of the craft, and can be moved sideways by operating the right controls. The effect of this is to provide a few degrees of roll to the craft, originally intended as a means of preventing it from rolling in a strong sidewind. In practice the lateral skirt shift is more useful than this; when it is operated at high forward speed, it induces an asymmetrical drag, tending to turn the craft. Well balanced turns can therefore be made using this control alone.

The HD 2 also has a skirt with removable sections which can be replaced very quickly. There are 90 sections in the skirt, and each can be replaced by one man in about two minutes, with the hovercraft at rest. No jacking equipment is needed.

Town and Gown

Mr Nathan M. Pusey, president of Harvard University, has established a faculty committee to "examine Harvard's relations with its urban environment" in another attempt to forestall summer rioting in Cambridge, Massachusetts. A number of Harvard faculties are already working in this direction. There is, for example, the Education School's work in the predominantly Negro schools in Roxbury, but the new committee's aim is to study and coordinate these various programmes and, with luck, to sketch out the broader role Harvard should play in solving local urban problems.

The committee is chaired by James Q. Wilson, professor of government and an expert on American politics, and includes Professor Daniel P. Moynihan, director of the Joint Centre for Urban Studies and formerly a leading member of Robert Kennedy's brains trust. Its conclusions will be looked for with interest.

Jobs for the Boys

In spite of Mr Anthony Wedgwood Benn's continuing distress over the brain drain, the fault seems to lie more with British industry than with British scientists. A recruitment programme run by Management Selection Ltd and sponsored by the Ministry of Technology has been overwhelmed with candidates working in United States industry and wishing to return to England. The problem is in finding British companies to employ them. P. D. Burnford, manager of the New York office of MSL since it was opened last September, does confess, however, that he is encouraged by the increasing interest on the part of British firms and is hopeful that several hundred applicants may be placed by the end of the first year.

As usual in any market, supply and demand do not match neatly. But at least the MSL scheme smooths the way to British jobs for those highly qualified applicants who would attract offers no matter on which side of the Atlantic they lived. As the programme becomes better known in the United States, the number of unsolicited applicants is growing rapidly. When specific openings in Britain are available, MSL tries to recruit candidates as it would in any country and arranges for especially promising men to be flown back to England for interviews. The men most in demand at the moment are electronics engineers, systems analysts, and business school graduates. Mr Burnford stressed that British industry's approach to this latter group has altered radically over the past two years; now any good British business school graduate will have a number of attractive offers from