

mechanical engineers will be hoping that this time their efforts to act as a reorganization corporation for the engineering industry come off. Others, scanning the list of engineering institutions, can easily see some candidates for mergers. The Institution of Railway Signal Engineers and the Institution of Locomotive Engineers look obvious bedfellows. And it is hard to see why the Institution of Mining Engineers, which looks after coal and iron ore mining, should be a separate body from the Institution of Mining and Metallurgy, which covers mining other than coal, and metallurgy other than iron. The most improbable institution of all is the Institution of Polish Engineers in Great Britain, established in 1940. Surprisingly, it still has 500 members.

Long Short Story

THE appointment at last of a new chairman to Short Brothers and Harland, the Belfast aircraft company, marks the end of an episode which has won few friends for the Ministry of Technology. Some two-thirds of the company is owned by the British Government, which therefore has an important say in its operation. In June last year, readers of the *Daily Express* and the then chairman, Mr C. E. Wrangham, in that order, discovered that Mr Wrangham was to be asked to resign his job. It seems possible that the Minister, Mr Benn, had not even met Mr Wrangham.



Air Vice-Marshal E. M. F. Grundy.

Mr Benn has not yet given the board of Short Brothers or the House of Commons a reason for his decision. In reply to six questions tabled on the matter on July 11, 1967, Mr Benn referred in the House of Commons to the substantial loss incurred by Shorts on the Belfast air freighter before Mr Wrangham's chairmanship, and the need for a reorganization to regain profitability. "This reorganization, which has already begun, can, I believe, best be carried through under the leadership of a new chairman." The ground for Mr Benn's belief, it has been suggested, was the Government's desire to see the company diversify itself out of the aircraft industry. Was it Mr Wrangham's fault that he was too successful in keeping Shorts in it? The company's troubles began in 1960 when it accepted a government order for ten Belfast aircraft in the belief that further orders would follow. None did, and the consequent loss of some £15 million made the company heavily dependent on government funds. Since that time Shorts has developed the Skyvan, a small two-engined freighter, and has built up a thriving

export market for its Seacat guided missile. Substantial hopes are also placed on Blowpipe, a radar controlled guided weapon against low-flying aircraft which can be carried and operated by one man. In addition, the company has contracts for the wings of the Fokker 28 and 228 jet airliners, the engine pods for the Rolls-Royce RB 203 engines and the wing tips of the Phantom. In 1967 the company won the Queen's Award to industry.

It may be a measure of disenchantment in British industry with the Ministry's handling of the matter that it has taken until now to find a new chairman for the company. He is Air Marshal Sir Edouard Grundy, who has been managing director of Royston Instruments since 1966. Royston Instruments, which manufactured the Midas flight recorder, was a member of the Royston Group of Companies, now in liquidation. Sir Edouard has had a distinguished career in the Royal Air Force and was Controller of Guided Weapons and Electronics in the Ministry of Aviation from 1962 to 1966. His experience of the RAF, government and industry should stand him in good stead if he is to keep Shorts in business and retain Mr Benn's favour.

Beyond the Classroom

How can any institution in America now be in education and not in politics? The answer of the Dean of Harvard's Graduate School of Education is that it cannot. His report for the academic year of 1966-67 is a chilling document. The American faith in the public—that is, tax-supported and tuitionless—school is no longer justified. Urban schools are failing the "deprived" today, as suburban schools failed the "academically talented" fifteen years ago. And the Federal Government's entrance into educational reform—marked by an initial infusion of \$1.2 billion in 1966—has not justified the hopes held out for it. The critics—white and Negro—are right to be disillusioned.

Even the enthusiasm which greeted the entrance of large corporations such as IBM and Time Inc. into the business of selling textbooks and making teaching machines seems to have been misplaced, according to Dr Theodore Sizer, dean of the school. Dr Sizer maintains that many of these companies have been rudely shocked. The school market is scattered and requires a large sales force; local school boards have little money for experimentation and teachers prefer to buy what is familiar. And "the gadgetry of computers and teaching machines and the rest has yielded interesting, but financially intolerable, results". Malaise has hit the education profession itself. State commissioners of education seem ready to wrest control away from the Office of Education in Washington; the private philanthropic foundations and the National Science Foundation give hints of stopping their outpourings of money into educational reforms. And the teachers themselves, underpaid—their average salary in 1966-67 was \$6,820—are not only having success at becoming trade unionists but are being truculent as well. The state of American education is uneasy indeed.

Dr Sizer could almost be accused of exaggerating the darkness to accentuate the light of his own school at Harvard. It has faced the challenge pretty squarely, by accepting as a fact the proposition that much of