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be expected to look after everyone else's interests as well.
One group of companies is believed to be represented by an
advertising agency who must include public relations in
their duties; but, on the whole, the weight of public relations
on behalf of the British aircraft industry seems to fall on
some half-dozen or so members of that industry who have, over the years, built up a close liaison with their American counterparts and technical Press, and who can, and do, try to keep things on an even keel whenever the opportunity arises.

Yet this hardly seems good enough, for it should be remembered that an accusation against one British product is an attack on all of them, and that such an assault must, in today's atmosphere of competition, fall on fertile ground and be used as ammunition by the less scrupulous. Maybe consideration might be given to either the appointment of a technical adviser to the British information services, or to a full-time representative of the British aircraft industry, or perhaps to the formation of a small committee in the States, composed of representatives of our industry who are here on business and who could use their combined influence

to try and overcome the international injuries which articles like that in the Wall Street Journal inflict on our two countries.

Any plan of this nature is a long-term project, however, and must be aimed at creating a state of mind rather than coping with specific instances. Most of the American aircraft industry and technical Press would be sympathetic to such a course. Th e exchange visits arranged by the S.B.A.C. and the A.I.A. and the joint technical conferences of the Royal Aeronautical Society and the Institute of the Aeronautical Sciences have, and are, removing misunder-standings on an executive and technical level; and the latent

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ROFESSO R FOCKE, formerly of the German Focke-Wulf company, and two assistants, Werner Belits and
Karl Degenhardt, have been engaged by the Brazilian government to collaborate with the Air Ministry at the Technical Aeronautical Centre of Sao Jose dos Campos. Tw o one-time "Fw " engineers, Friedrich Schaper and Gerriet Winter, are already at work in the centre on four-year contracts.

In 1945, owing to the growing needs of commercial aviation, Brazil began considering three schemes to remedy the scarcity of aeronautical engineers : to engage foreign technicians; to continue sending young men abroad for training; and to build a training centre in Brazil. The Air Ministry adopted the third solution, which offered many economical and other advantages, and invited Professor Richard Smith, of the Massachusetts Institute of Technology, to come to Brazil in 1947 and suggest measures for carrying the proposal out. Plans were drawn up for a Technical Aeronautical Centre, to be built at Sao Jose dos Campos, on the Rio to Sao Paulo highway, within convenient distance of the port of Santos, thus facilitating transportation of equipment by land and sea. The site is located in a broad valley and has ample space for extensions and for an aircraft factory. The centre comprises a Technological Institute of Aeronautics (ITA), for training and research, and three "Co-operating Institutes" to co-operate with the aircraft industry, civil aviation and the Brazilian Air Force. For the present the functions of these institutes are centralized in ITA. The latter includes a Preparatory (or Pre-Engineering) School and a Professional School, in each of which the courses are of three years' duration.
Tuition is free, but students undertake to serve for two years as reserve officers in the Air Force after graduating. The govern-ment provides food at cost price and makes grants to students when necessary. Candidates must pass an examination to enter the preparatory school, in which the second and third years are devoted to the basic subjects of any engineering course. The professional school specializes in aeronautical engineering, aircraft manufacture, airport construction and electronics. Students, after graduating and taking their B.Sc, may remain for additional courses of one, two or more years in special subjects or research,

goodwill—which must not be confused with competitive desires—is deep and real. But the degree of understanding that will prevent the type of article under discussion requires a wider foundation and a more general approach; and it must include the daily Press and the big weekly magazines. For unless the general public is included, any educational programme is useless. How to achieve all this might well form the basis of a discussion at the next meeting of our two countries' aviation representatives.

Sapphires: Righting the Wrong
CJINCE the above was written an unusually informative adver-
" tisement, and one which should do a good deal to correct the
mis-statement described by our correspondent in America, has been published by the Curtiss-Wright Corporation. Prominently displayed in the New York daily newspapers on December 17th, it gives the following details of the J-65's progress:—
December 15th, 1950.—Initial letter contract signed by the U.S.A.F. for the Curtiss-Wright Sapphire. February 23rd, 1951.—Conversion of British drawings to American standard completed. February, 1951.— C-W.-modified, British-built Sapphire flight-tested in prototype Republic XF-84F. November, 1951.—C-W.-modified, British-built Sapphire became first engine to complete full-scale military climatic test (—60 to 4-130 deg F). December, 1951.—First five American-built tool-trial J-65S delivered to the U.S.A.F.
April, 1952.—Curtiss-Wright J-65 Sapphire completes preliminary U.S.A.F. flight rating test. April 19th.—Production J-65 deliveries start. June 4th.—Production delivery to Republic corporation commences. July, 1952.—150-hrtest at thrust over7,200 lb completed. September.— 150-hr Air Force test with aluminium compressor blading. Novem-ber 23rd.—Production J-65 flies in production Republic F-84F Thunder-streak. The J-65 Sapphire completes 5,000 bench hours and 400 flight hours and is selected to power four types of "advanced military aircraft." November 291/1.—150-hr substantiation test with steel compressor blading. December yrd.—Air Force accepts first production F-84F Thunderstreak. December 10th.—Additional 150-hr test to substantiate sub-contracted parts; 3,000 sub-contractors in 28 States.

- obtaining degrees of M.Sc. or Dr.Sc. Prospective students may,
1 in accordance with their qualifications, enter in any year of the
x preparatory school or be admitted directly to the professional
school.
The Technical Aeronautical Centre, when completed, will have
: accommodation for 1,500 students and 300 graduates. It will
* include dormitories, nouses for the teaching staff, quarters for
i" employees and their families, sports ground and stadium, lake and swimming pool, cinema, two military runways, 3,000 m in
, length, one civilian runway of 2,000 m, eight hangars, two wind
f tunnels and research laboratories.

; The entire project will take some years to complete, but the
; school was opened without delay in Rio and continued there until
, the necessary accommodation could be prepared at Sao Jose dos
1 Campos. The original staff included Professor Smith and a f number of well-known American professors, to each of whom
r Brazilian assistants are now assigned for training. The first
1 students graduated in 1950 and an increasing number of candidates ; are coming forward each year for tuition.
f Professor Smith considers that Brazil, as an importer of petro-
leum products, should concentrate on developing "a type of plane
r with heavier engine, using less fuel than is customary with 5 British- and American aircraft." He looks forward to a day, not 1 very far distant, when Brazil will build her own aircraft. In the 1 design of these cargo space and low fares will receive more con-sideration than speed and passengers' comfort.
1 The first step is now being taken to establish an aircraft industry :
) an agreement is about to be signed with the Fokker company for 3 a licence covering the S.14 jet trainer, and "other more conven-tional planes," in the Galeao factory at Rio de Janeiro. The S.14,
3 it may be noted, is Derwent-powered, like the Gloster Meteors recently purchased by Brazil. Of the seventy Meteors to be
s supplied, sixty will be Mk.8s and the rest Mk.7s.
r Mr. Robert Masson, Director of Soci6t£ Nationale de Con-
: structions Aeronautiques du Sud-Ouest, visited Brazil with the
; French Minister of Air to attend the proceedings of the Brazilian
t Aviation Week, and while he was there he explained the charac-
, teristics of the twin-engined Bretagne and showed plans of the
1 Palas auxiliary turbojet. He has arranged with National Trans-
, portes Aereos to return to Brazil for trials with the Palas.

BRAZIL GOES AHEAD

Ambitious Plans Developing for Aeronautical Centre: Fokker S.14 Licence Likely