748 FLIGHT

A.S.T. COMES OF AGE . . .

and, after Baginton had been considered, Watchfield was chosen;
the unit moved-in in July 1940, followed by the E.F.T.S. staff.
Flying for wireless training ceased at Hamble on August 4th, and
all tlying-training tuere Had stopped by this date. In fact,
the only flying at Hamble was that of Spitfire testing, for A.S.T. had become a part of the Civilian Repair Organization under Supermarines at Woolston. Assigned to Spitfire repair—and stated to be the only civil concern doing such work—this side of the company quickly had a payroll of 500, doing a 12-hr day plus a nignt shift. Though this branch has no primary place in this narrative we may record that, with its satellite unit at Exeter, it repaired very nearly 3,400 Spitfires. Directed by Mr. H. W. Sidwell, O.B.E., A.F.R.Ae.S.—a designer well-known in the aviation world—the Aircraft Division has since become a very important side of the company.

The Air Ministry told A.S.T. to dispose of the old Avro trainers, which soon graced the headquarters of 27 A.T.C. units. Tiger Moths—24 at Watchfieid—took their place. Blind-approach training under the S.B.A. procedure started at Watch-field in the autumn, using Oxfords.
After ten years of existence—in 1941—Air Service Training was employing a staff of 2,193

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Hamble, Ansty, Watchfield and
Exeter. Ansty became No. 9 B.F.T.S. during 1941, while Watch-field was styled No. 1 Beam Approach School. The former school had an establishment of 77 (and later 108) Tiger Moths; Watch-field used Oxford is.

New units opened under the aegis of A.S.T. in December 1941 were No. 3 E.F.T.S. at Shellingford and the R.A.F. School of Air Traffic Control at Watchfield. The aircraft side of A.S.T. was very busy at this time, not only with Spitfire repair, but in converting Spitfires into the first Seafires and carrying out other similar work; a B-17—FA 710—was converted for anti-sub-marine work at Hamble while, at the end of the war, Yorks were being converted for B.O.A.C. A central establishment for Ameri-can aircraft was also set up at Hamble, where such types were prepared for British service.
The first post-war training flight took place on August 1st, 1946, and by the end of that year tnere were 112 ground students (mainly following radio courses) and eight undergoing flying training. The F.E.T. (Further Education and Training) grant scheme supported many of these pupils.
In 1947, the R.A.F.V.R. school and Southampton University Air Squadron started to use A.S.T.'s facilities, while the company's aircraft division began to assume the responsibility of providing flying test-beds for Hawker Siddeley engines—examples being the Mamba-Lancaster and the Sapphire-Meteor. Large-scale Meteor production was also undertaken at Hamble for Gloster assembly. Marine radio courses were commenced in 1948, in which year there were 335 students in residence.

Overseas Schools

Late in 1948 the Indian Government approached A.S.T. with a view to opening an Indian Air Force Technical College at Banga-lore. The negotiations proved successful and operations began in 1949. The college trains officers and apprentices of the R.I.A.F., carrying out instruction which, in the R.A.F., is split up among eight different schools. The staff of about sixty are all members of A.S.T.; the commandant is G/C J. Beaumont, O.B.E., A.F.C., and instruction is given under a curriculum rather similar to that found at Halton. Many officers and apprentices have now passed out from Bangalore and their high standard reflects the success of this establishment.

A similar ramification of A.S.T. grew in 1949 in Pakistan. G/C. Barton and W/C. Jenkins were instrumental in establishing a school for R.P.A.F. apprentices, which was opened in January 1950 at the former B.O.A.C. base at Korangi Creek, Karachi. A. Cdre. F. E. Vernon, C.B., O.B.E., M.A., is the director
of studies, assisted by Lt-Cdr. J. R. Le Claire as deputy director. The British A.S.T. staff numbers about sixty.
A third overseas school was opened in July 1950, at Mauripur, Pakistan, to train R.P.A.F. transport pilots; a fighter conversion school was added in July 1951. Together, the Indian and Pakistan schools require the provision of a staff of about 170—all from A.S.T.—and they have played the major part in schooling the Air Forces of both countries.

Today, more than ever before, students are coming to Hamble from foreign countries—about 70 per cent—with the sponsoring of their governments—for complete aeronautical training. It should, therefore, be appreciated that, in addition to the facilities here listed, Air Service Training are frequently called upon to instil into their pupils both a knowledge of English and a basic understanding of what may be termed "Western ideology and customs." The magnitude of this undertaking is underlined by the recent acceptance of ten students who arrived at Hamble three days after leaving their desert home; until they arrived they

could speak little English and knew very little of aeronautics. The schools at Hamble are controlled directly by W/C. A. H. Abbott, A.F.C.j who is, in consequence, a very busy man. He came to A.S.T. after a distinguished Service career, his last appointment having been that of Station Commander at R.A.F. Fairford, then an H.G.C.LJ.
Tne School of Navigation at present has some 20 courses in operation; under S/L. Hoy, twenty instructors administer to some 150 pupils from many countries. Tne majority leave with the Flight Navigator's Licence (I.C.A.O. standard) although A.S.T. can train pupils to any degree of competency required.
Service units at Hambie include No. 1 Basic Air Navigation School, using Anson T.2is, for wnich unit A.S.T. provides ser-vicing, pilots, instruction and accommodation. This B.A.N.S. takes National Service pupils straight from I.T.S. and trains them to within 12 weeks of their Wings. In addition, the Air Naviga-tion school provides all technical navigational instruction for No. 14 R.F.S., who number about 220 pilots, 60 navigators and 35 signallers.
Closely allied to the navigational school, the School of Radio, under Mr. F. Baltrop, began from practically nothing in 1946 but can now provide training for almost any kind of radio or radar operator or mechanic. Tne principal qualification is the M.C.A. Flight Radio Operator's Licence—which can be obtained from a full-time ab initio course lasting twelve months. A special three-month conversion course is also available, giving instruction provisionally accepted for the new first-class certificate of compe-tency under the I.C.A.O. Air Navigation Order, 1949.

Radio and radar mechanics are also passed out by this deparment, there being a great amount of both air- and ship-borne
apparatus available for instruction. A.S.T. offer a Ministry of Transport eight-month course on marine radar and, from Januar of this year, have provided instruction for the radar maintenance certificate. At present, ex-Service foreign students predominate but English radio officers will probably soon find more openings for their employment—due, in no small part, to the efforts made by Mr. Baltrop.
Hamble's engineering school has been justifiably renowned ever since it first opened in 1931. Mr. N. A. H. Luke, M.S.L. A.E., A.R.Ae.S., the C.E.I., was, incidentally, once chairman of the S.L.A.E., and is now president. Shortly after the late war there were some 300 students—many holding F.E.T. grants—taking Engineers' Licences; though fewer are now in residence, the quality of output is even higher. Most students take an ab initio course lasting two years, at the end of which time they sit for "A" and "C " licences.

There is now—starting this month—a "Diploma" course available consisting, in effect, of the present two-year "approved" course with an additional four courses of three months each During this extra year such subjects as advanced properties o materials and applications of electronics are studied with a view to fitting the Diploma student for "B," "D " and "X" licences—and, no doubt, for Parts I and II of the A.F.R.Ae.S. examination also. In order to provide apparatus suitable for so comprehensive a course, a new instructional hangar is being used for the installation of some interesting (largely A.S.T.-devized) testing equipment. This includes a Ricardo variable-compression engine, very fully instrumented; an electronic dynamic-balancing

machine; and an "unbalance-measurer" for such items as reduDominated by a well-kept Derwent, this row of sectioned engines is

found in a lecture-room of the Engineering School. Much of the sectioning
has been done at Hamble; a Theseus is currently being so treated.