

both versions should it receive a U.S.A.F. contract. Mr. Patterson also implied that United did not propose to replace medium-haul Convairs with a turboprop type.

F-102 Modifications

IT has long been appreciated that, irrespective of the thrust available, no aircraft will fly faster than the speed of sound and remain controllable unless its configuration is correct down to the smallest detail. The original Convair XF-102 and YF102, prototypes of a radar-directed, missile-armed all-weather interceptor for the U.S.A.F., looked fast and were very powerful, but it is only recently that, through apparently trivial modifications, the type has exceeded Mach 1.

The principal changes are: a "droop-snoot" along the inner 70 per cent of the span of the five-per-cent-thick wing, in conjunction with two fences; a more conical and drooping nose; a revised canopy with less framework and flatter side-panels; different intake-geometry, capable of passing more air (required by the up-rated J57, which gives 16,000 lb thrust with after-burner); and large fairings to improve flow around the wing/tail/fuselage junction.

The new YF-102A was built in 117 days from the start of re-design. On its second flight it exceeded Mach 1 while climbing to 35,000ft, and Richard Johnson, Convair test pilot, then reported good control as he accelerated well beyond Mach 1 on the level.

Amy Johnson Scholarship

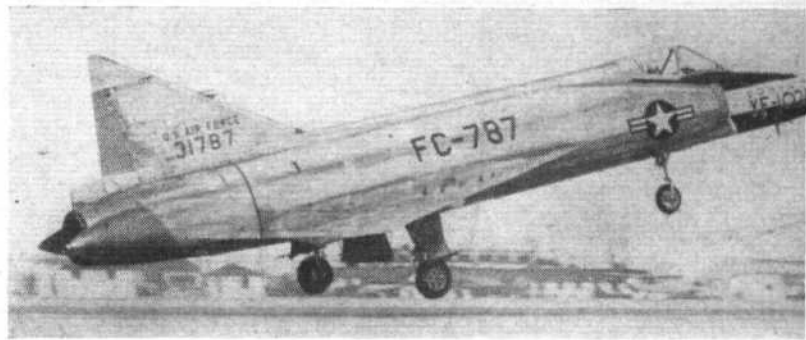
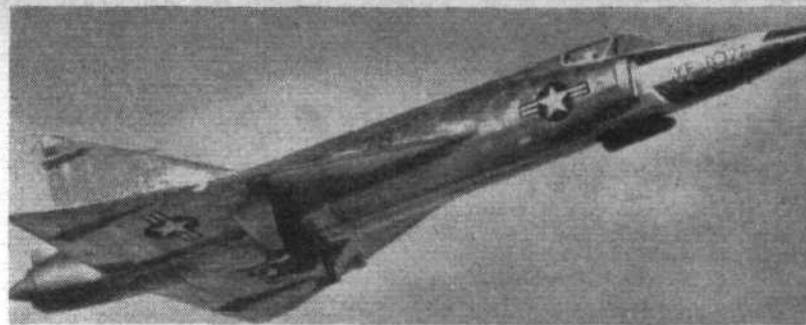
THE first recipient of the Amy Johnson Flying Scholarship, as recorded in our issue of December 31st, is Miss Dorothy White of Runcorn, Cheshire. To mark the occasion of the award a sherry party was given last week by the Women's Engineering Society at 35 Grosvenor Place, London, S.W.1. The president, Miss K. M. Cook, paid a brief tribute to the work of Amy Johnson (who was herself president of the Women's Engineering Society from 1934 to 1937) and went on to explain the foundation of the scholarship. Miss I. J. Ferguson, secretary to the scholarship committee, spoke about the reasons for the award and of the work of women pilots, more than a dozen of whom were present on the occasion. Another award is to be made next year.

Miss White—who, as mentioned above, is the first recipient—was selected from among 26 applicants. She is 28 years of age and works as a bank cashier. As a member of the Women's Junior Air Corps she won a flying scholarship in 1947; and, for three years until the W.R.A.F.V.R. ceased to exist, she was a pilot in that branch of the Service. With the help of her £150 scholarship she is to try to obtain her assistant flying instructor's certificate—probably at Liverpool.

Living up to its Number

A BOEING B-47 Stratojet of the U.S.A.F. has stayed in the air continuously for 47 hr 35 min, covering during that time some 21,000 miles (i.e., about four-fifths of the earth's circumference). The crew were Col. David A. Burchinal, commander of the 43rd Wing, Maj. Forrest McCoy, Capt. Stephen Franko, and Maj. Pat H. Earhart. Having flown a repeated flight-pattern

FOUR INTO FORTY-SEVEN: Credit for the magnificent 47-odd-hour duration flight by a Boeing B-47 Stratojet, recorded on this page, is shared by this U.S.A.F. crew. From left to right, they are: Col. David A. Burchinal, Maj. Forrest McCoy, Capt. Stephen Franko, and Maj. Pat H. Earhart. The fourth crew-member was a supernumerary.



GOING AND COMING: These photographs show the take-off and landing of the revised Convair YF-102A (see column 1) at Edwards A.F.B. A tail parachute is used for landing.

between North Africa and Great Britain, the B-47 finally landed at Fairford, Gloucestershire. An undisclosed number of air-refuellings took place.

The flight recalls the performance of the piston-engined Boeing B-50 bomber *Lucky Lady II*, which, in 1949, covered 23,108 miles in 94 hr. Announcing the B-47's achievement, Mr. Harold Talbott, U.S. Secretary for Air, said that it was made to study range possibilities of the Stratojet and problems of crew fatigue and bombing navigation. It showed, he said, that the U.S.A.F. were second to none in a world in which atomic weapons may decide the outcome of any future war in the first days of conflict. "The Air Force is now getting the planes, radar and other equipment necessary to keep it so strong that no country will dare attack us," he added. But it faces a real problem in keeping qualified men, he said. He called for pay increases and other moves to make the Air Force more attractive as a career.

Canadian Airlift

FINAL phase of the movement of No. 1 Fighter Wing, R.C.A.F., from England to its new base at Marville, France, was to have begun with the departure, on January 10th, of four R.C.A.F. Fairchild C-119F Packets with the first loads of station equipment. The weather on the date of departure, however, was too poor for the airlift to begin. The four Packets, two each from Nos. 436 (Montreal) and 435 (Edmonton) Squadrons, had crossed the Atlantic shortly before and were to carry loads of 15,000 lb direct from North Luffenham to Marville, returning to the U.K. without refuelling. Altogether, between 200 and 300 tons of equipment are involved and the remainder of the 1,000 tons to be moved will be despatched by rail.

Almost all the personnel of the three squadrons are being transported to France and Germany by R.C.A.F. North Stars and the squadrons' F-86s are sent from North Luffenham to Airwork for overhaul and re-assignment to the Greek and Turkish Air Forces. The squadrons are receiving their new Sabre 5s on the Continent as they arrive by "Random" ferry operations from Canada.

The three squadrons (No. 410 and 441 already on the Continent, and No. 439 due to move shortly) will concentrate at Marville as soon as the base is ready and are expected to be operational as a Wing on April 1st. No. 1 Wing will then form part of the 1st Air Division under 4th A.T.A.F., the headquarters being respectively at Metz and Trier.

Avro-Canada Lay-off

IT was announced last week by Avro Aircraft of Toronto that, owing to a "stretch-out" in the production of the CF-100 all-weather fighter, some 1,000 employees have been made redundant; this is approximately one-tenth of the company's total staff (Orenda Engines, Ltd., is now a separate member of the Hawker Siddeley Group).

This news is not unexpected; although the total CF-100 order (650-plus) has not been reduced, production is now going so well that, if the present rate were maintained, there would be a difficult gap before the forthcoming CF-105 could replace it in the factory. The very advanced CF-105 has now been in the active design-stage for about a year, and it may be assumed that it will be ready for production somewhere around 1958.

The Avro "flying saucer" project is now known to have been abandoned, owing to the very heavy expense of developing the idea, coupled with the possibility that the final design would not