

World Air News

General Dynamics F-111

MODELS OF THE F-111 multi-purpose tactical fighter being developed for the U.S.A.F. and U.S. Navy were recently unveiled and further details released. General Dynamics, Fort Worth, as prime contractor, are responsible for the F-111A Air Force version, while Grumman, the main subcontractor, will assemble the naval variant, F-111B, and be responsible for the development of naval features. The first machine, an F-111A, is expected to fly "within a year", with the F-111B twelve months after that.

An order has already been placed for twenty-three development aircraft: eighteen F-111As and five F-111Bs. Total procurement is expected to amount to well over 1,000 aircraft. In addition, the R.A.A.F. has ordered about twenty-four F-111As to equip two squadrons which, according to Mr. A. M. McFarlane, head

of the Australian Department of Air, will be operational before the end of 1968, the year that they are delivered.

Powered by two Pratt & Whitney JTF-10A-20 turbofans, each developing about 19,000 lb. thrust with afterburning, the F-111 will have a speed of about Mach 2.5 and ceiling of over 60,000 ft. Both versions will have a crew of two and a length of over 70 ft. The Air Force's F-111A will have a span of 30 ft. with the variable-sweep wings closed and 70 ft. extended; span of the Navy's F-111B will be slightly more than 70 ft. when its wings are extended, this version having longer outer wing panels (which can be folded for carrier stowage). All-up weight of the F-111A will be over 60,000 lb., but the F-111B for carrier service will weigh less.

Armament of the Air Force version will consist of conventional or nuclear weapons, including air-to-surface tactical missiles

and rockets; while the Navy's F-111B, intended primarily as an interceptor, will carry up to six Phoenix air-to-air missiles under the fixed portion of the wing.

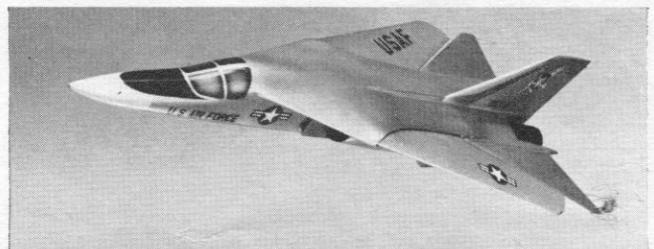
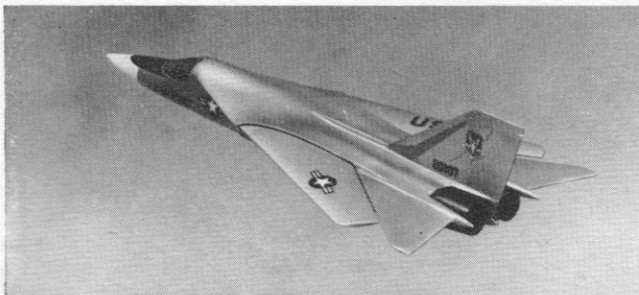
Farnborough display

This year's S.B.A.C. display and exhibition at Farnborough will be held from Monday, 7th September to Sunday, 13th September inclusive. Aircraft making their first appearance at Farnborough are expected to include the BAC One-Eleven, Super VC10, BAC 221, TSR-2 (fly-past only), Buccaneer S.2, 748MF Andover, Argosy Series 200, production Beagle 206, Belfast and Turbo-Skyvan.

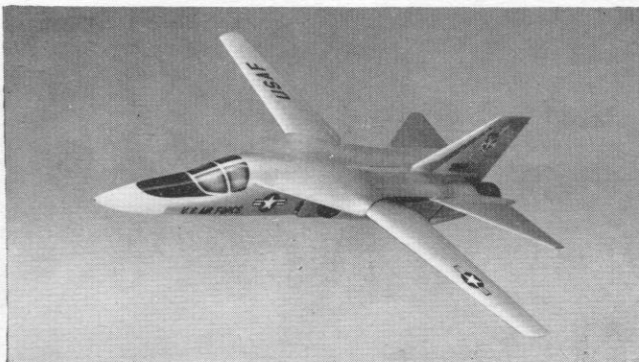
U.S. "COIN" developments

It is expected that the U.S. Navy's "COIN" (counter-insurgency) committee will shortly complete its evaluation of the aircraft projects submitted for this competition. Plans call for the purchase of over five hundred "COIN" aircraft. Illustrated here are two more contenders, the Beech PD-183 powered by two 650-s.h.p. Canadian Pratt & Whitney T-74 turboprops, and the Martin Company's project which has a "blown" inverted-V tail to improve low-speed performance and stability.

The Martin machine will have a top speed of over 300 m.p.h. and a stalling speed of less than 30 m.p.h. Initial rate of climb will be 4,000 ft./min., service ceiling 34,000 ft., and ferry range over 2,000 miles. Dimensions are 27 ft. 6 in. span, 36 ft. 4 in. length and 13 ft. 6 in. height; weighing 4,900 lb. empty, and up to 12,000 lb. loaded (non-STOL), the air-



Models of the General Dynamics F-111 (TFX) tactical strike fighter. Three views show the F-111A version for the U.S.A.F.; while the U.S. Navy's F-111B, with variable-sweep wings "in action", is shown below (RIGHT)





LEFT: Found Bros. FBA-2C CF-OZV-X for Georgian Bay Airways. RIGHT: The earlier FBA-2A being tested with floats

craft will have a maximum payload of 4,000 lb. The "blown" tail—which takes its air from the engines' exhaust, ducted through the booms—is based on an invention by Hans Multhopp, the W.W.II Focke-Wulf designer, who is now principal scientist at the Martin Co.'s Baltimore Division.

Although no details are yet available of the Hiller proposal, it is stated to be a VTOL machine using a completely new type of propulsion system.

R.A.F. Fighter Command

The number of Lightning squadrons in R.A.F. Fighter Command will be increased from five to seven next year when No. 23 Squadron at Leuchars and No. 64 at Binbrook, both at present flying Javelin FAW.9s, re-equip with Lightning F.3s; these are the last two Javelin squadrons in Fighter Command.

The Lightning F.1s of No. 74 ("Tiger") Squadron, Leuchars, are now being re-

placed by F.3s with Redtop missiles, and No. 111 at Wattisham will follow suit before the end of the year. Bloodhound II surface-to-air missiles, which are air-transportable, are superseding the earlier Mk. Is. One of the first squadrons to be formed with Bloodhound IIs, however, will be No. 65 at Seletar, Singapore, in the F.E.A.F.

Found utility aircraft

Now being produced by Found Bros. Aviation Ltd., Toronto, Canada, the FBA-2C 4/5-seat utility aircraft powered by a 250-h.p. Lycoming O-540-A, has a gross weight of 2,950 lb. and disposable load of 1,300 lb. Maximum speed is 147 m.p.h., stalling speed 48 m.p.h., and range with 10 per cent reserves 610 miles. Dimensions of the aircraft are 36 ft. span, 25 ft. 6 in. length and 7 ft. 9 in. height.

The prototype FBA-2A, with tricycle landing gear, flew on 11th August 1960; production FBA-2Cs have a 6 in. longer cabin and tailwheel undercarriage or can be fitted with skis or floats. The first of two FBA-2Cs for Georgian Bay Airways, Parry Sound, Ontario, flew on 9th May 1962 but was lost in an accident the next month. Georgian Bay's second aircraft (CF-OZV-X) flew on 12th June 1963 and is being followed by CF-OZU as a replacement.

Caravelle sales

Three recent orders bring the total number of Sud Caravelles sold to 179. One Caravelle III has been ordered by the German company Lufttransport Unternehmen (L.T.U.), whose present fleet consists of three Fokker F.27s, a Cessna 310 and a Bonanza.

Indian Airways have ordered a fourth Caravelle VIN, and Sterling Airways A/S,

the Danish charter company, have ordered one Caravelle Super B with an option on a second. Sterling Airways are at present operating five DC-6Bs.

One-Eleven improvements

B.A.C. have announced improvements in the payload and range of the One-Eleven, mainly the 300 and 400 Series aircraft, made possible by taking advantage of increased thrust offered by developed versions of the aircraft's Rolls-Royce Spey engines. The new design weights (former figures in parenthesis) are:

	300 Series	400 Series	200 Series
Max. take-off weight	85,000 lb. (82,000)	78,000 lb. (78,500)	74,000 lb. (73,500)
Max. landing weight	76,000 lb. (69,000)	76,000 lb. (69,000)	66,000 lb. (65,000)
Max. zero fuel weight	69,000 lb. (61,500)	69,000 lb. (61,500)	59,000 lb. (58,000)
Payload	19,200 lb. (15,800)	19,200 lb. (15,400)	Being determined (13,800)

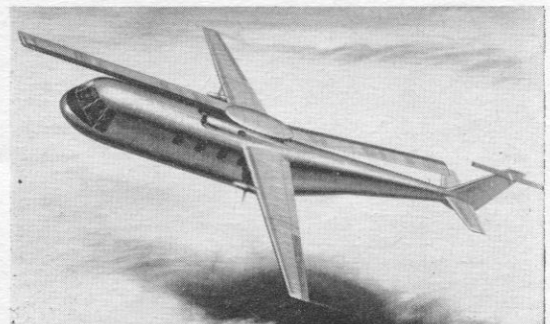
New R.A.F. Comms. Sqn.

A new communications squadron, based at R.A.F. Andover, Hants, has been formed by merging the Maintenance Command Communication and Ferry Squadron at Andover with the Transport Command Communication Flight from R.A.F. Upavon, Wilts. Known as the Western Communication Squadron, it will be administered by R.A.F. Transport Command.

The move is part of a plan to economise on communication facilities by grouping units on a regional basis. The Southern Communication Squadron was formed at Bovingdon, Herts, last year by merging the Bomber and Fighter Command Communication Squadrons and the Coastal Command Communication Flight. A third squadron, for the north of England, is to



LEFT: Two more U.S. "COIN" projects, the Beechcraft PD-183 (TOP) and a mock-up of the Martin machine, which has a 'blown' tail. RIGHT: A Lockheed proposal for a helicopter with the speed and range capability of a fixed-wing aircraft. After take-off, the main and tail rotors are stopped and the machine then functions as a conventional aeroplane





I-ATIP, the first of three Fokker F.27 Friendships for the Alitalia subsidiary, Aero Trasporti Italiani, based at Naples. With the recent order for one F.27 for the Directorate General of Civil Aviation of Pakistan, Friendship sales now total 278

World Air News . . .

be formed in October. The squadrons are equipped with Ansons, Devons and Pembrokes.

Several smaller communication units have been disbanded, and their aircraft used to increase the strength of the two new squadrons. They include: No. 22 Group Communication Flight, Technical Training Command, Ternhill; No. 24 Group Communication Flight, Technical Training Command, Colerne; the Technical Training Command Communication Flight at Wyton; and the Flying Training Command Communication Squadron at White Waltham.

R.A.F. Brize Norton

Brize Norton, Oxfordshire—which will be returned to the R.A.F. when the U.S.A.F.'s B-47s now stationed there are withdrawn to the U.S.A. in March 1965

—is to be developed as a second major R.A.F. Transport Command terminal (the other being Lyneham, Wilts) and will be the main base for the ten Belfasts and eleven VC10s ordered for the R.A.F. Upper Heyford will also lose its B-47s in 1965 but will be retained by the U.S.A.F. as a dispersed operating base for tactical aircraft.

Luftwaffe cuts

Owing to a manpower shortage and a cut in funds, states the West German Defence Ministry, the *Luftwaffe* will have seven fewer squadrons than originally intended. Only seven squadrons instead of nine will now be re-equipped with F-104G Starfighters, two reconnaissance squadrons instead of four with Fiat G.91s, and transport squadrons will be cut from six to three. First-line strength of the *Luftwaffe* will then consist of about 380 F-104Gs and 170 G.91s.

Battle of Britain week

In addition to the R.A.F. Stations mentioned last month, page 207, Leuchars, Fife (Fighter Command) will be open to the public on R.A.F. "At Home Day", Saturday, 19th September.

French A.F. Magisters

Henry Potez have received an order for a further 130 Magisters for the French Air Force. The new machines will be powered by 1,058-lb. s.t. Turboméca Marboré VIs and will therefore presumably be C.M.173 Super Magisters. Magister orders now total 881 (for six countries)

L.S.A.B. FILM EVENING

THE WEDNESDAY, 12th August, meeting of the London Society of Air-Britain will include two films: "Death of a Sport", a 90-minute American production concerned with aerobatics, and "Warning Star", which depicts the work of the early-warning Constellations. The meeting will be held at 7-9.45 p.m. in the lecture theatre of Holborn Central Library, 38 Theobalds Road (near Gray's Inn Road intersection), W.C.1. Visitors are welcome.

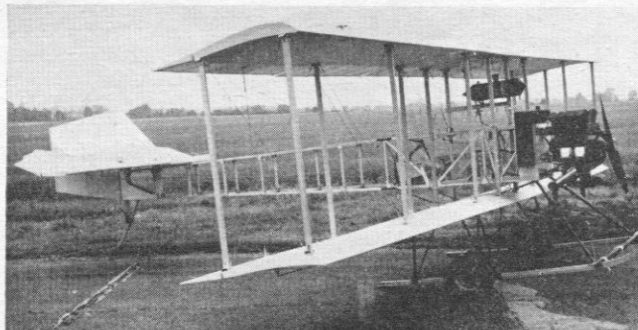
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- The Association now has two convalescent homes, at Storrington, Sussex, and St. Annes-on-Sea, and is building a third for the chronic sick.
- Many thousands of welfare cases are dealt with each year on matters of pensions, employment, legal, etc.

Send for enrolment form to:

The General Secretary, R.A.F. Association, 43 Grove Park Road, London, W.4.



ABOVE: This replica of the Eardley Billing Biplane has been designed, built and flown by Harold Best-Devereux, the aeronautical consultant, for the 20th Century Fox film "Those Magnificent Men in their Flying Machines".

BELOW: An impression of a "Tiger" class cruiser converted to carry 4 Wessex helicopters (see April issue, p. 98)

