

THE ROYAL



OBSERVER CORPS

RECOGNITION


Journal
and R.O.C. GAZETTE



Volume 7 MARCH 1965 No. 3

Part I AIRCRAFT SILHOUETTE EDITION

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THE ROYAL OBSERVER CORPS

RECOGNITION JOURNAL
AND R.O.C. GAZETTE

This edition is Part One of four issues covering all major types currently flying at the time of preparation. The final edition will contain an index for the combined reference sections.

The Royal Observer Corps Recognition Journal and Gazette is a monthly publication produced by the Directorate of Flying Training (R.A.F.), Ministry of Defence, and prepared in collaboration with the Ministry of Aviation (Air Technical Publications). Applications for copies must be submitted through the normal official publications supply channels—not to the Editorial Office or direct to the Ministry of Defence.

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When Etienne de Silhouette was characterising the personalities of his time in the solid black drawings which today bear his name, he could hardly have foreseen that within a hundred years there would be a military use for his idea.

The silhouette drawing of personal portraits is no longer fashionable, but an adaptation of it has become one of the most valuable components of identity training lessons. The ship, tank or aircraft silhouette summarises character—as did Etienne de Silhouette's original drawings—and since it is the basis of its character it is used whenever possible in *Journal* lessons' training.

The training value of the silhouette has often in the past been misunderstood. It is usually uneconomical in time and energy to train to identify silhouettes alone except in special circumstances. Its best use is in complementing photographic information in such a way that the trainee is continually referring to it to identify target pictures.

This edition of the *Journal* and the three following cover all aircraft worthy of recognition at the time of going to

press. It is emphasised, however, that the purpose of these editions is information and reference as distinct from training and we have, therefore, added a certain amount of basic information about the aircraft concerned, including the various designations by which each may be known. We have also included wing span (or in the case of helicopters, fuselage length) and one or two notes where the outline may be altered by the addition of external equipment.

All that is, as we have said, by way of information which is not the true business of identifying. We make no apology for repeating that identifying is a skill which comes from "doing"—from action—rather than from "remembering" information, i.e. amassing knowledge, and a clear distinction between these two aspects of learning must be made.

Names are important in identity training; this is because they are much more easily assimilated than designations. For that reason we have, wherever possible, given the preferred name of the aircraft. Where a name is not possible the most useful designation has been used in the title. At the end of the fourth part there is an index by means of which readers can turn up a silhouette by name or designation quickly.

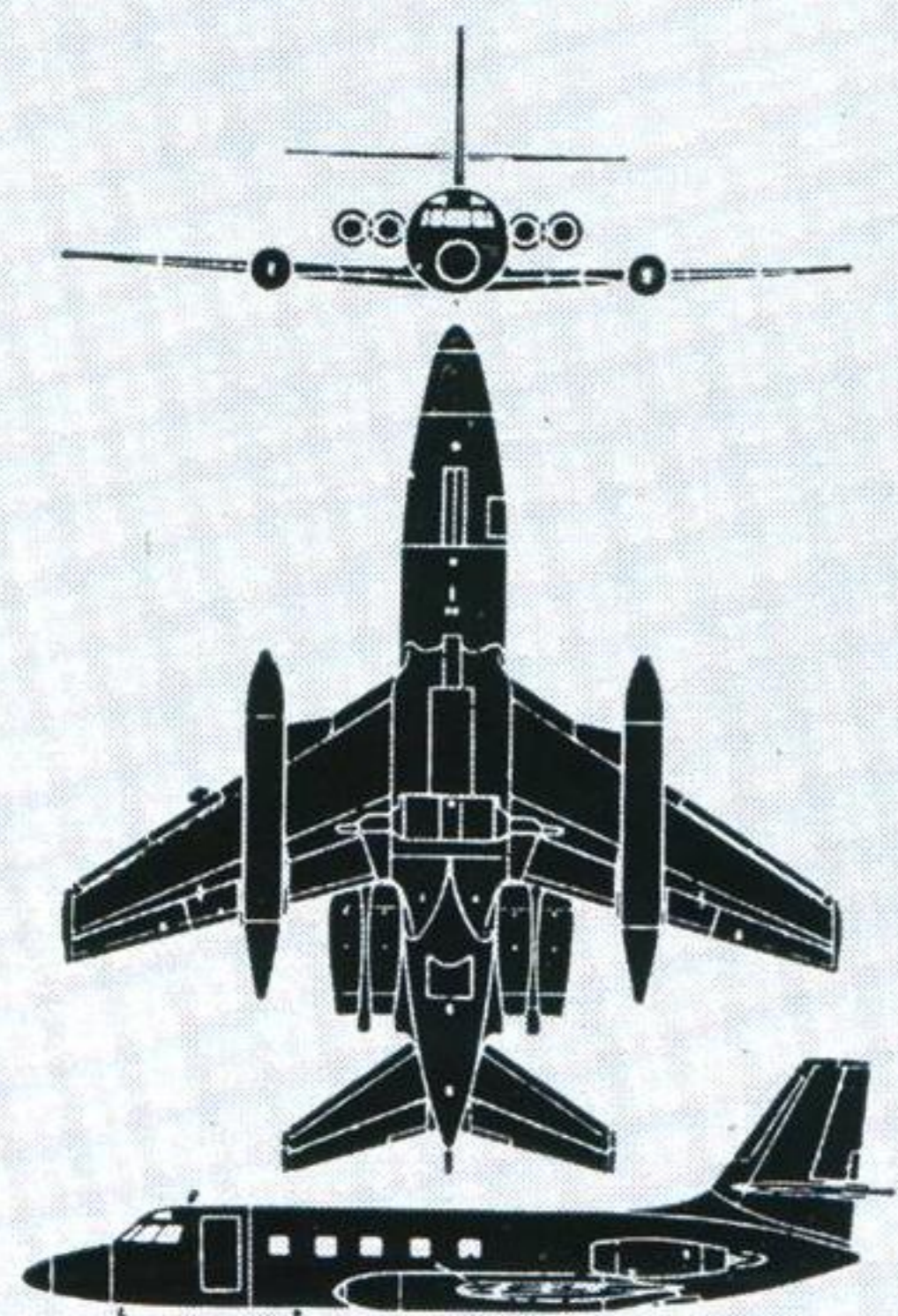


THE SILHOUETTE





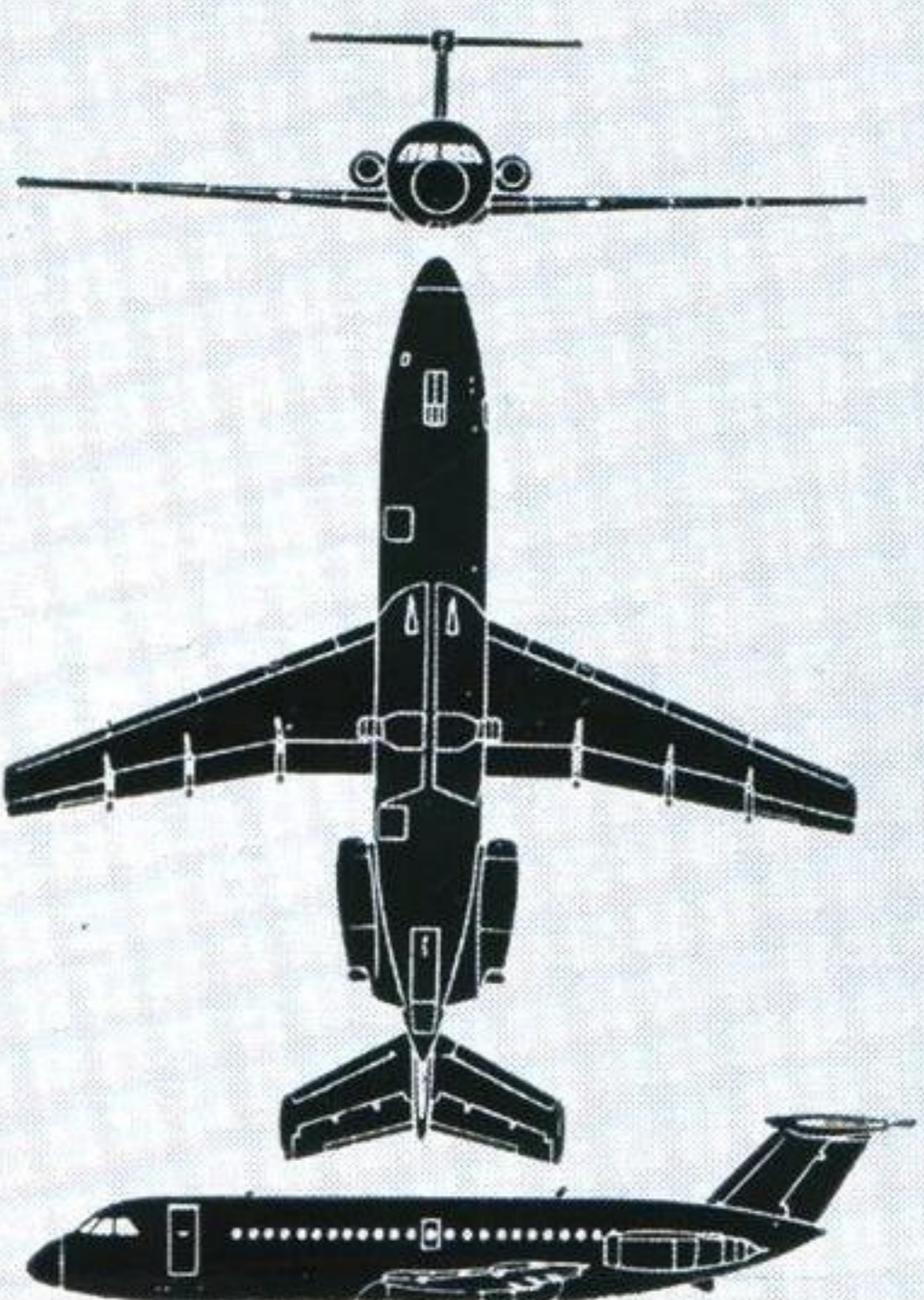
VICKERS VC10 Long range jet airliner ordered for airlines and the R.A.F. Super VC10 with fuselage lengthened by 13 feet now in production.
Span 146 feet (VC10) 140 feet (Super VC10)



JETSTAR This jet utility transport and crew trainer is in U.S.A.F. and U.S.N. service as the C-140; two are used by the Federal German Republic and over 50 are in civil use.
Span 54 feet



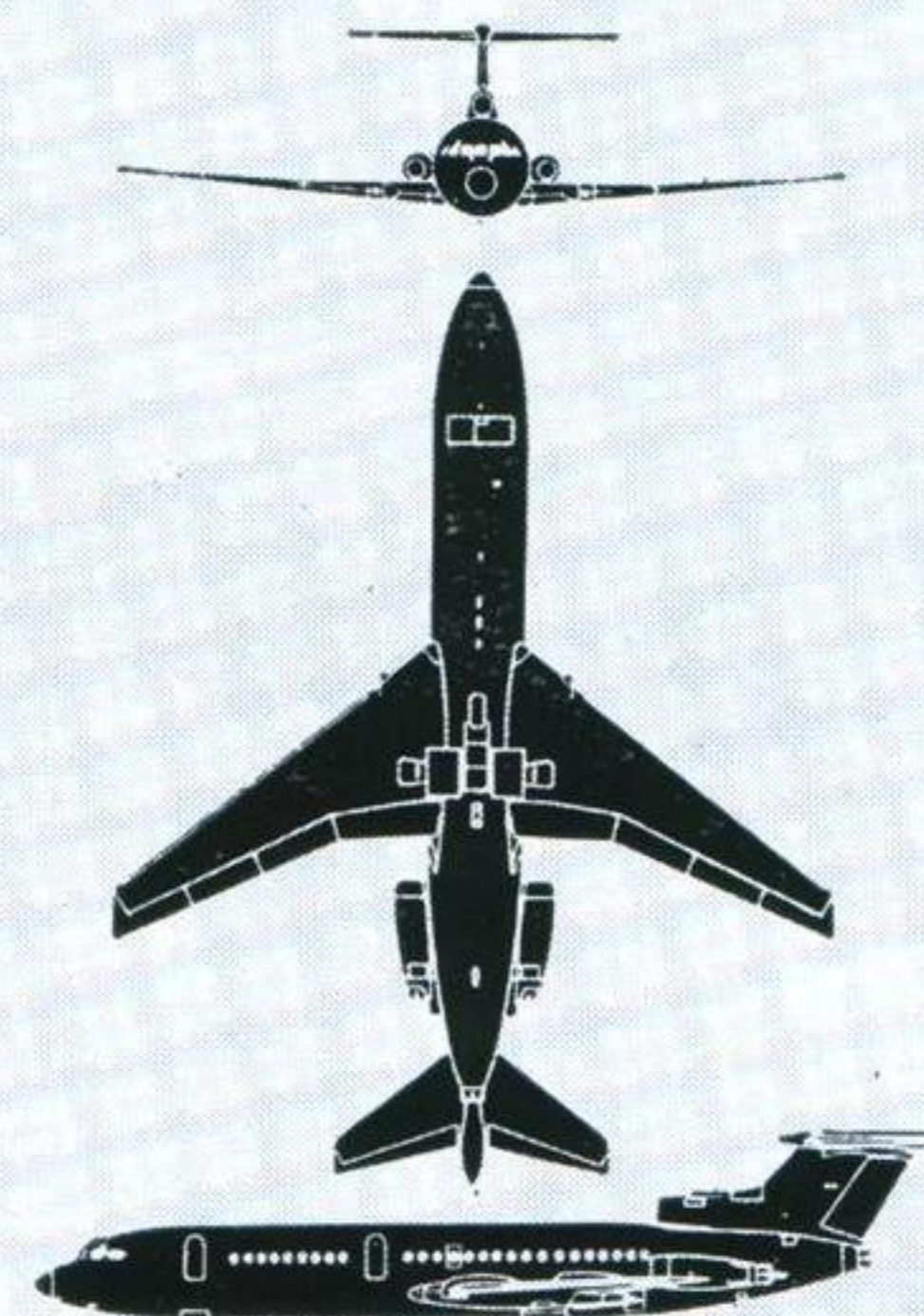
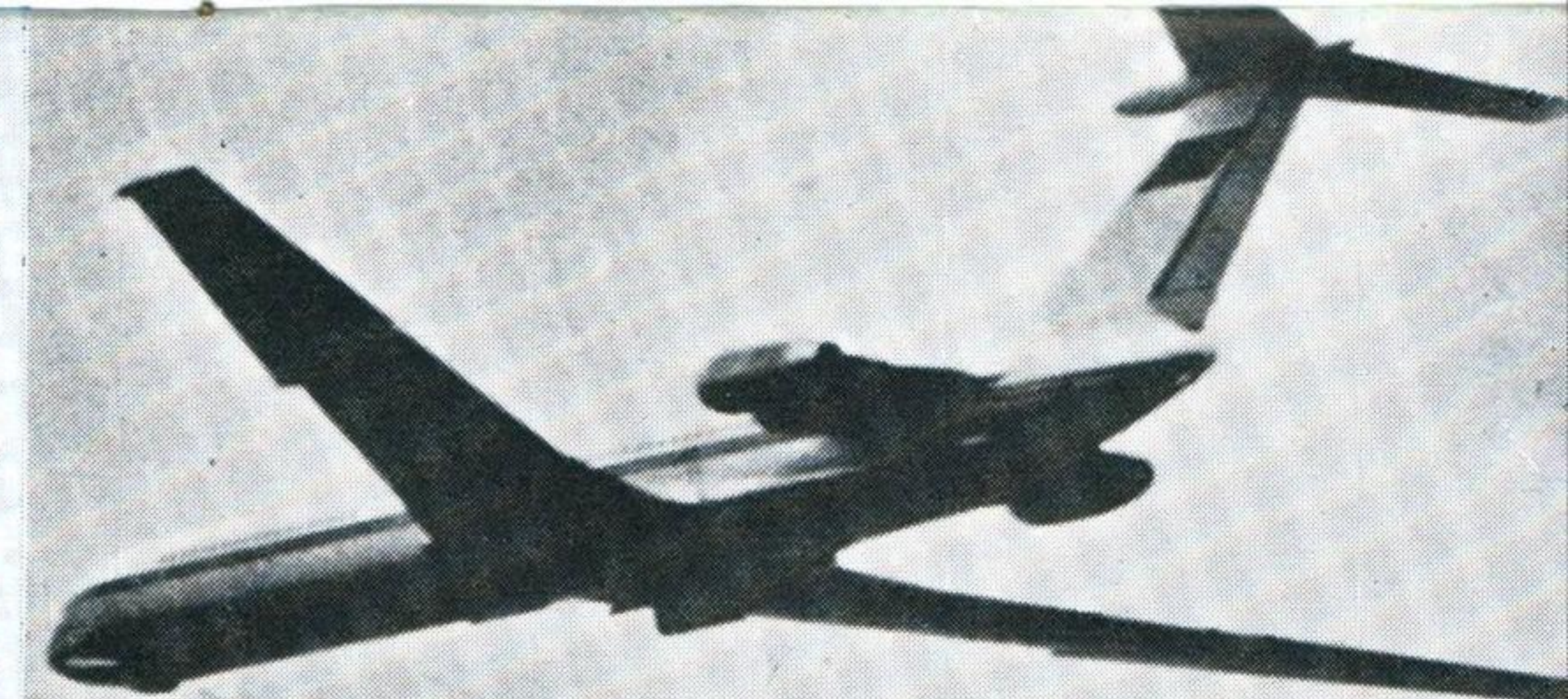
BOEING 727 In the same class as the Trident, this Boeing is on order for various airlines world-wide, including German and Japanese lines. Span 108 feet



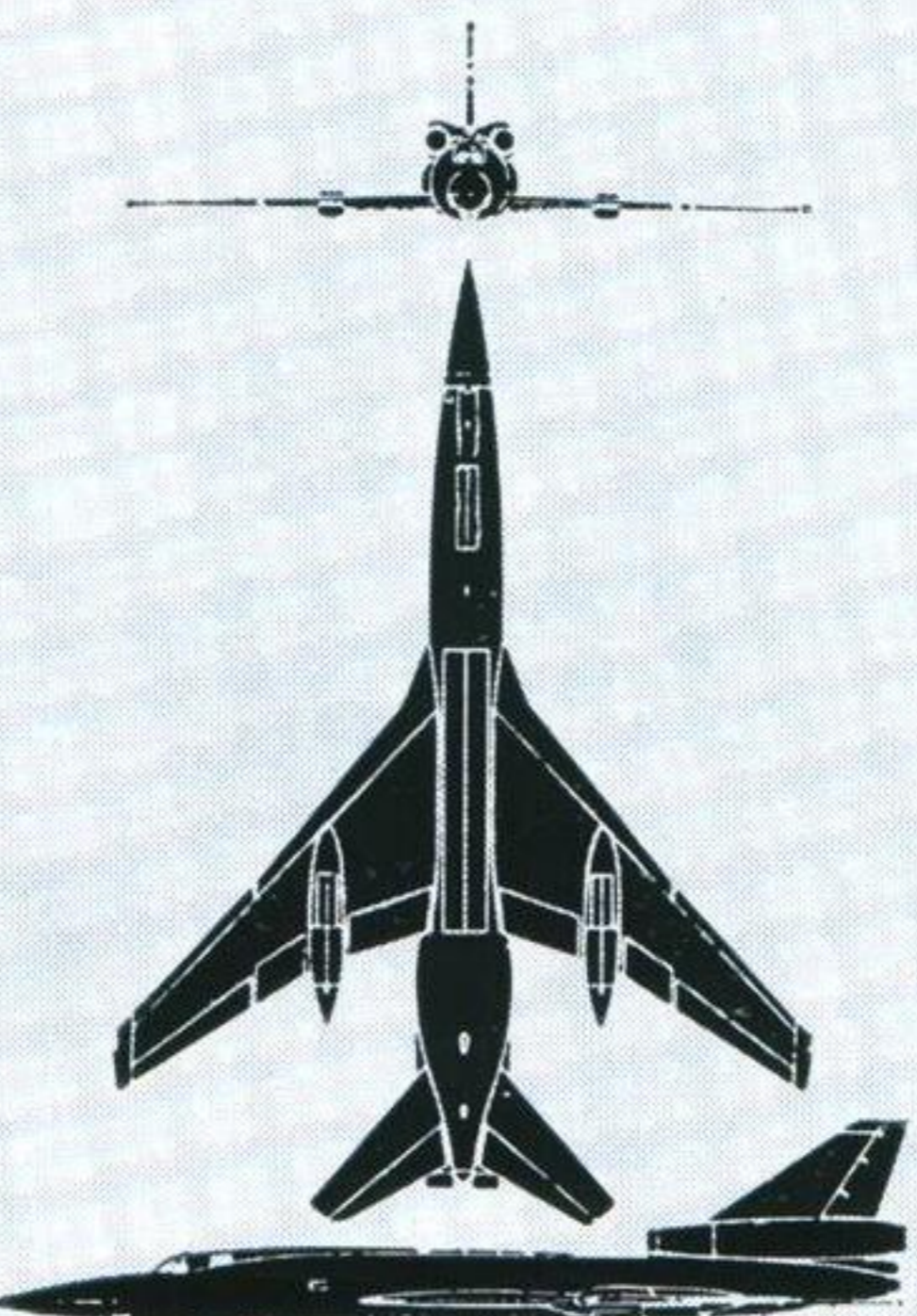
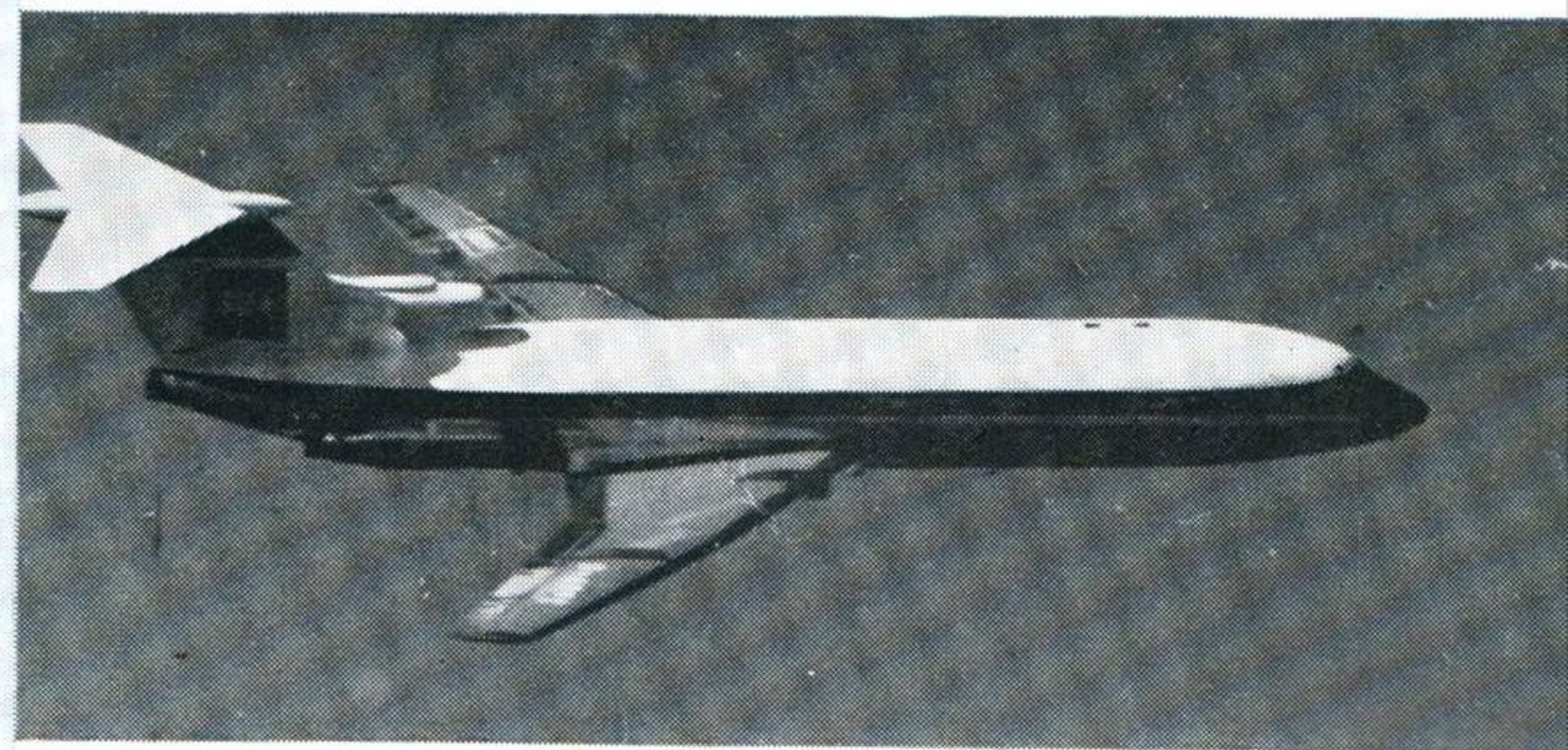
ONE-ELEVEN Some fifty of these B.A.C. short to medium haul transports are expected to enter service this year. Series numbers 200, 300, 400 apply according to loadings and power units.
Span 88 feet



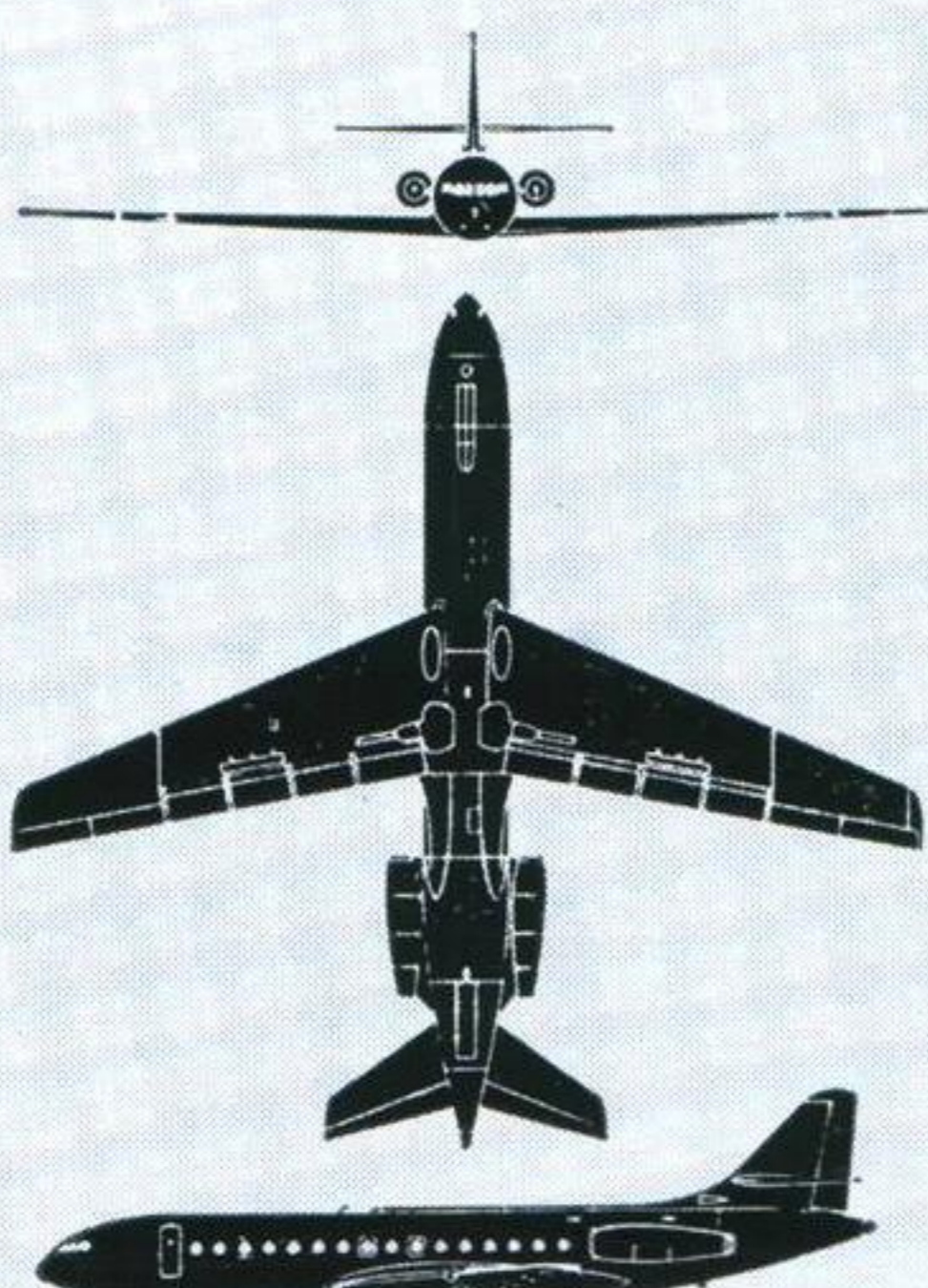
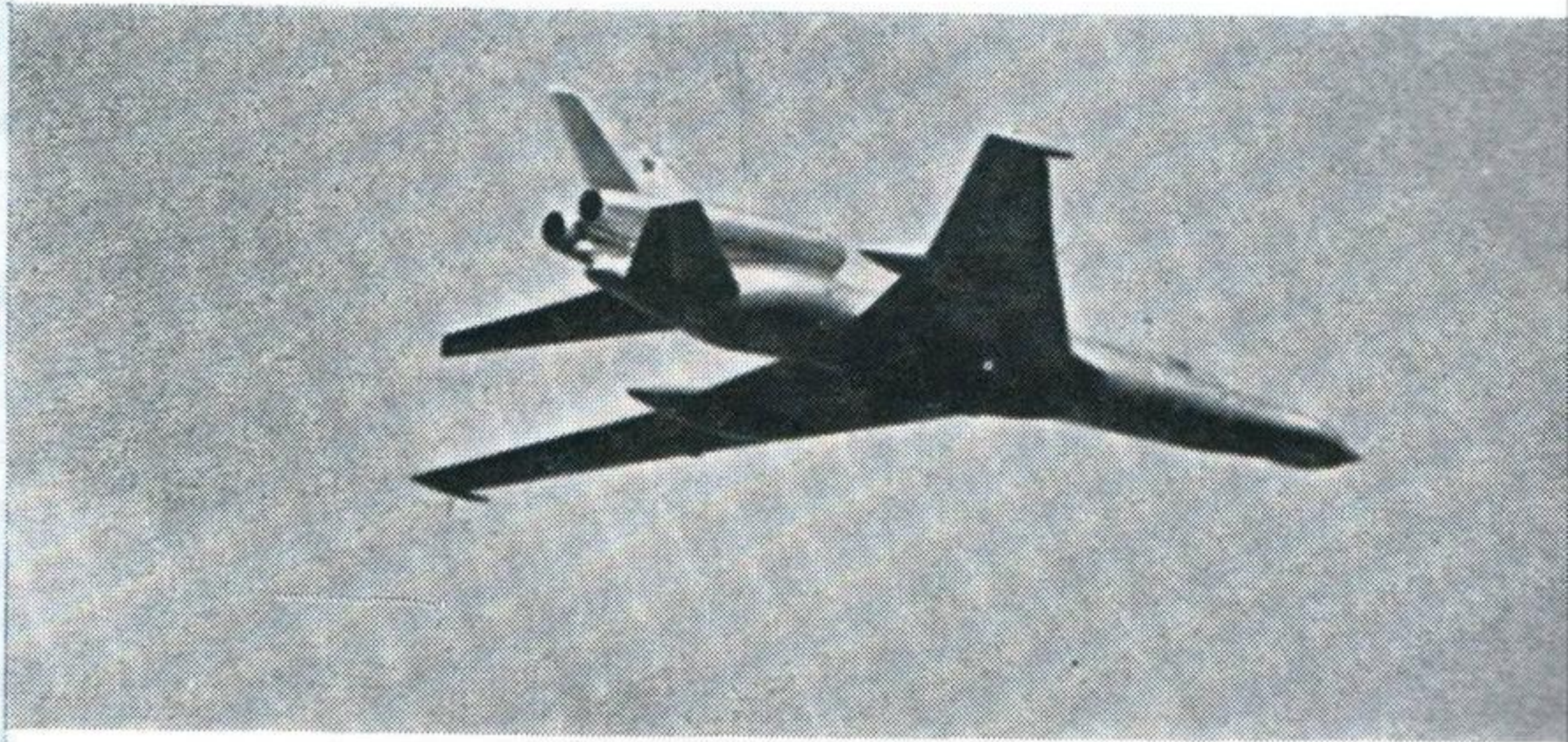
CLASSIC Soon to be in regular Aeroflot service is this Ilyushin Il-62 of which one of the prototypes is depicted.
Span 114 feet



TRIDENT Three-jet short-to-medium haul transport with B.E.A. and other airlines. IC, IE and IF versions with varying loadings have a fuselage length variation of 115-124 feet. Span 90-95 feet (according to version)

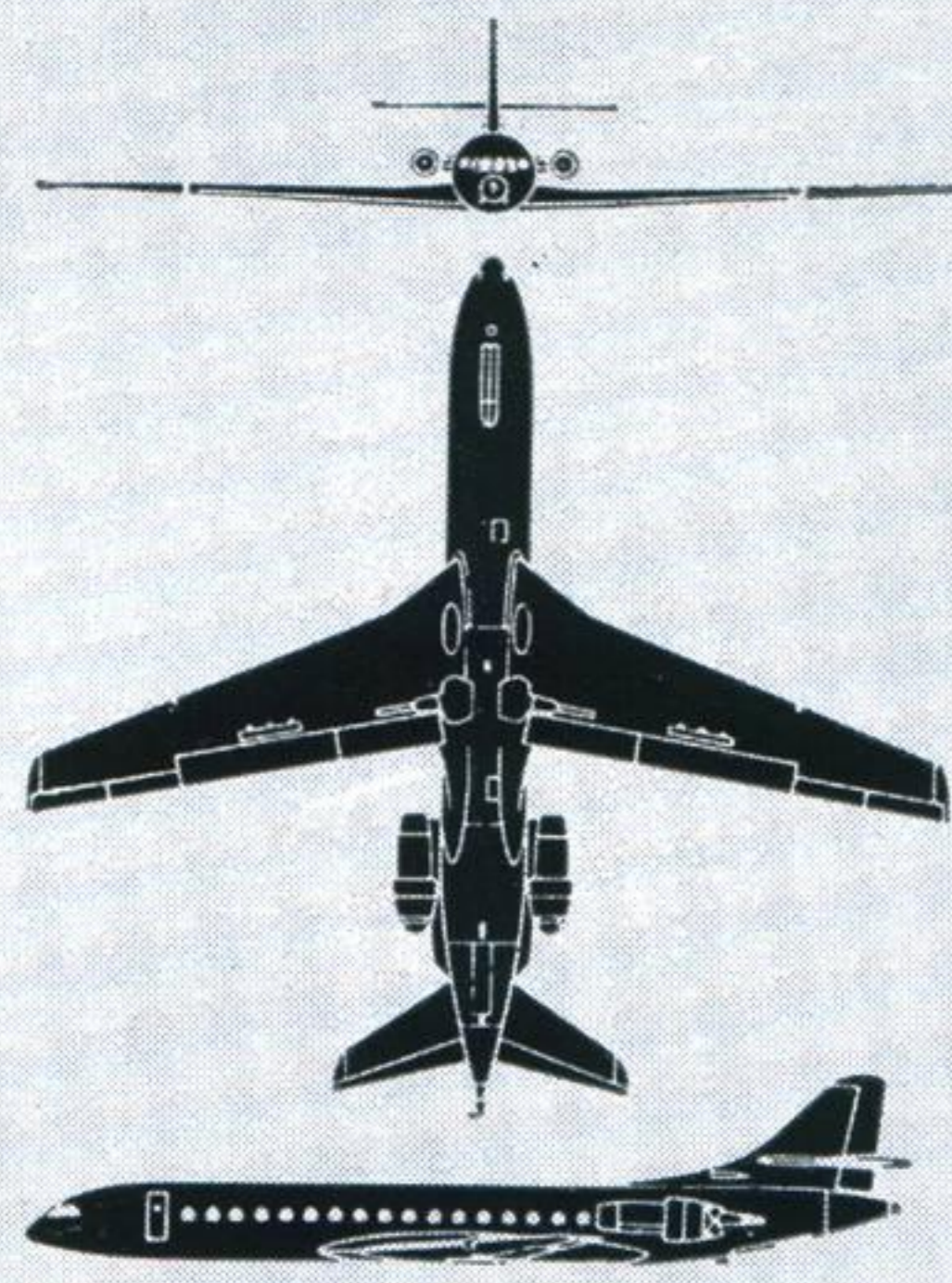


BLINDER This Russian strike/reconnaissance bomber may be seen with a large missile recessed into the fuselage body.
Span 91 feet



CARAVELLE First of rear-jet civil transports, this French airliner is produced in several versions with only minor variations, but see also Caravelle Super.
Span 112½ feet





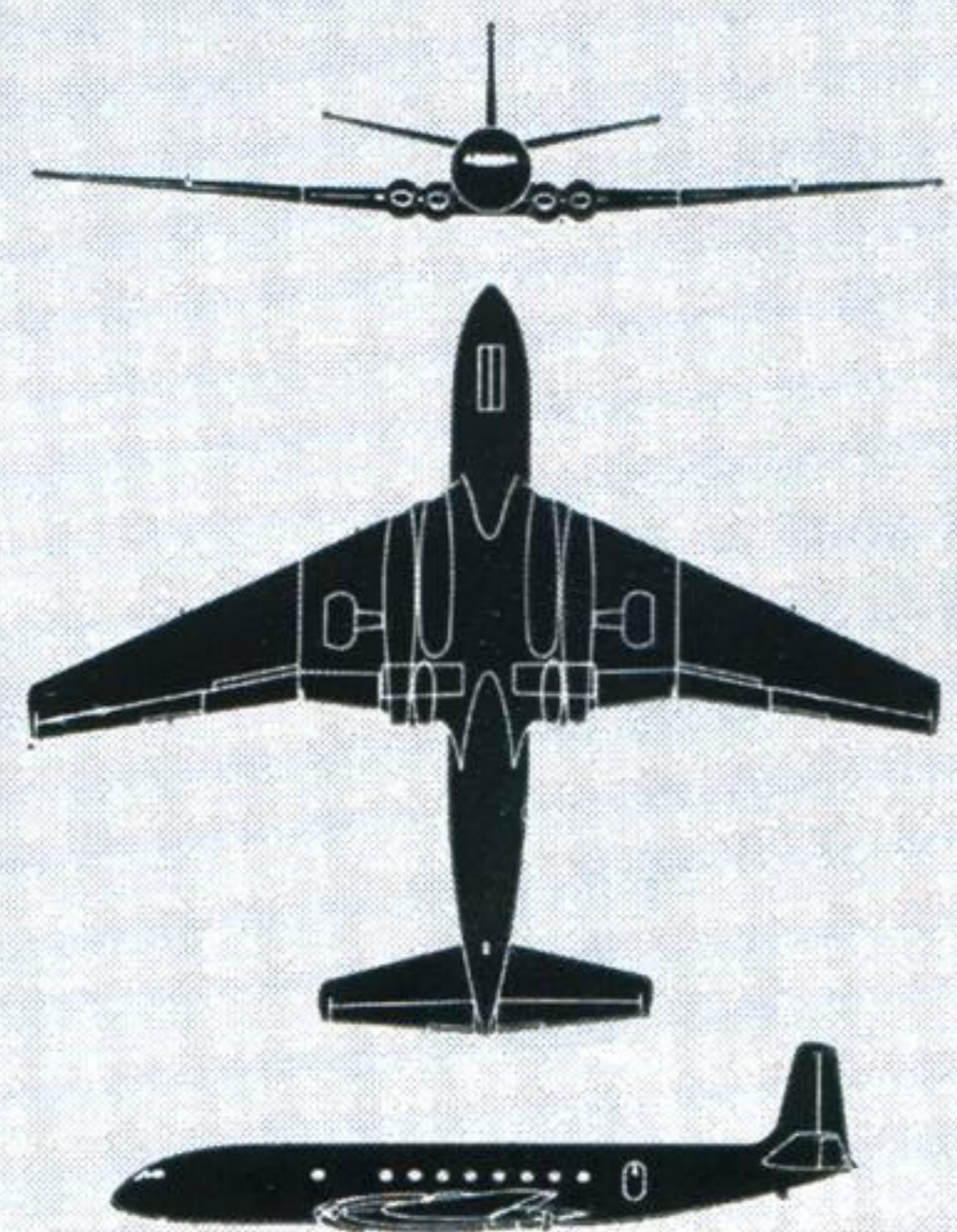
CARAVELLE SUPER A development of the original design with wing root extension, five feet increase in fuselage length and longer tailplane. Span 112½ feet



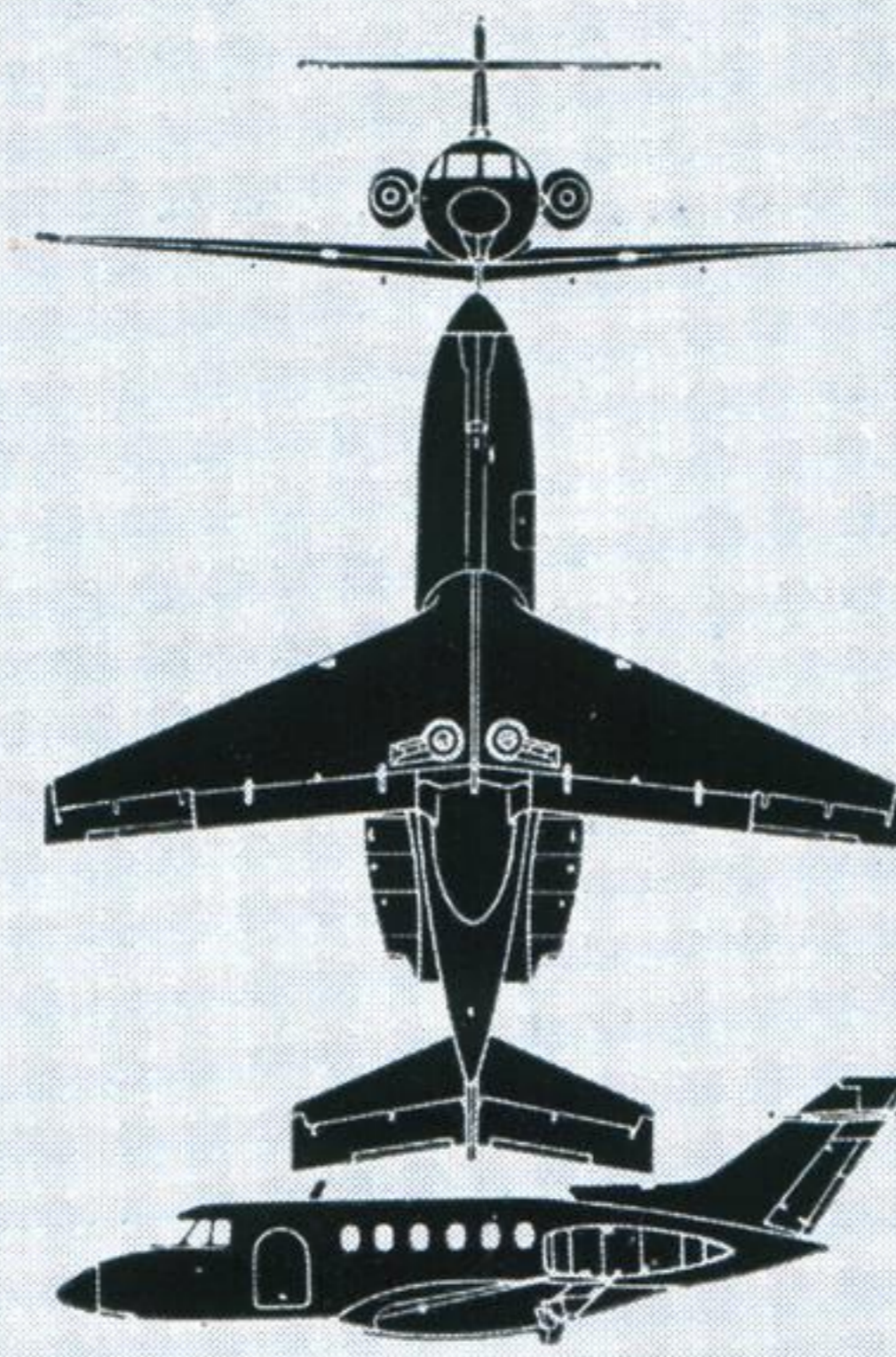
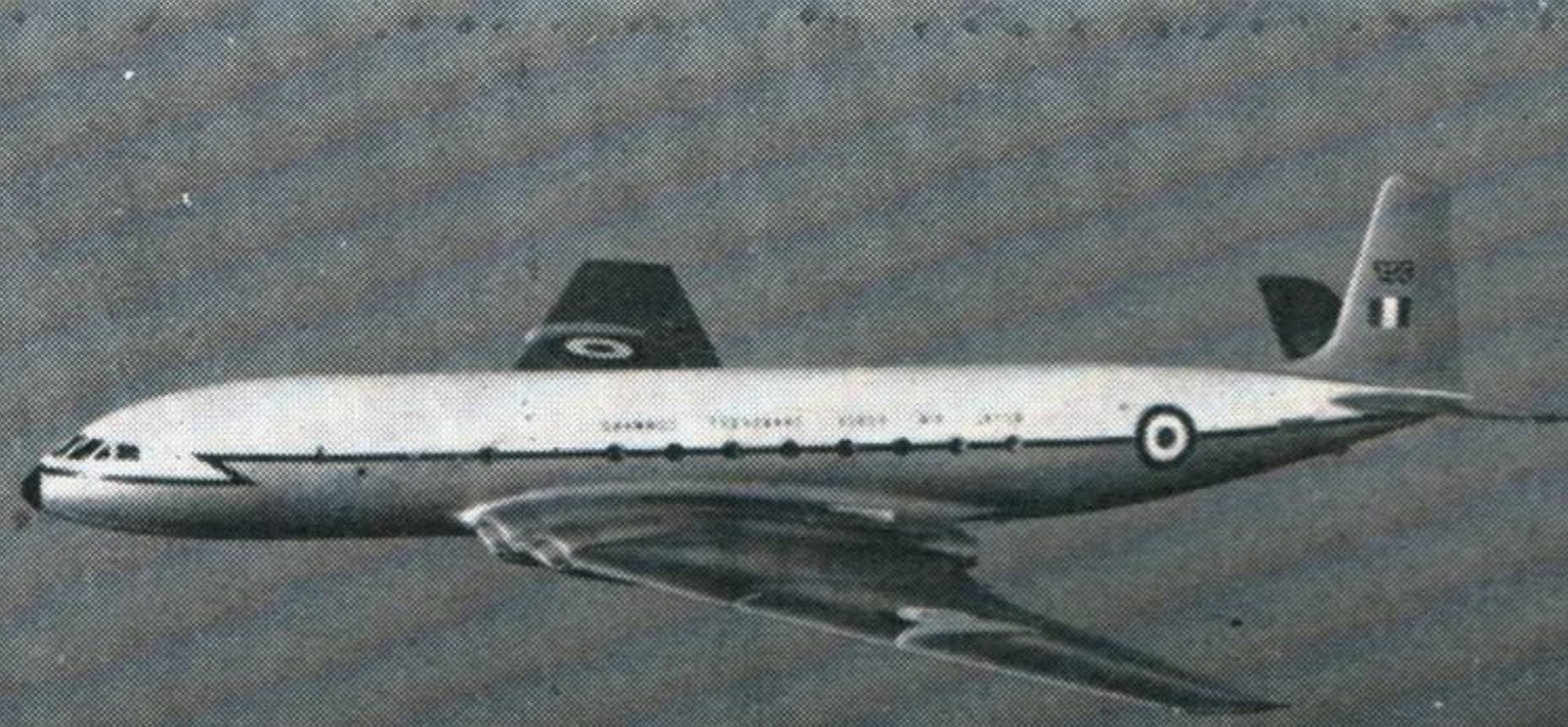
JET COMMANDER The production version of the eight-seat Aero Jet Commander will have a 2½ feet fuselage length increase. Span 43 feet



MYSTERE 20 French eight-ten seat executive transport, scheduled to enter service this year. Span 50½ feet (production) 47½ feet (prototype)



COMET 2 C.2 and T.2 Comets, externally similar, are used by the Royal Air Force for freight, passenger carrying and crew training. Span 115 feet



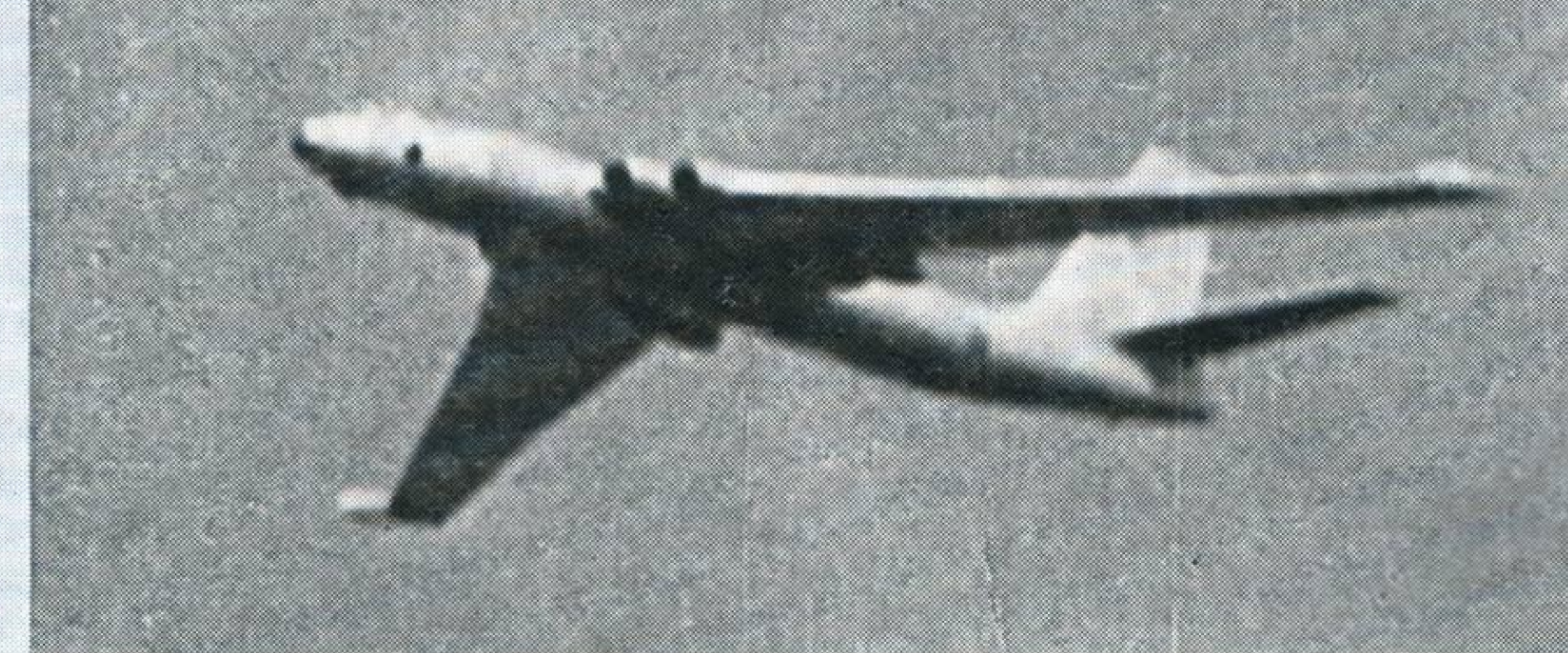
DOMINIE As Dominie T.1 the HS125 (formerly DH125) will enter the R.A.F. for navigational training and is on order as a light civil transport with several organisations. Span 47 feet



SABRELINER The North American T-39 of the U.S.A.F. and U.S. Navy is used both as a combat and a utility trainer in three basic versions of similar configuration. Span 44 feet

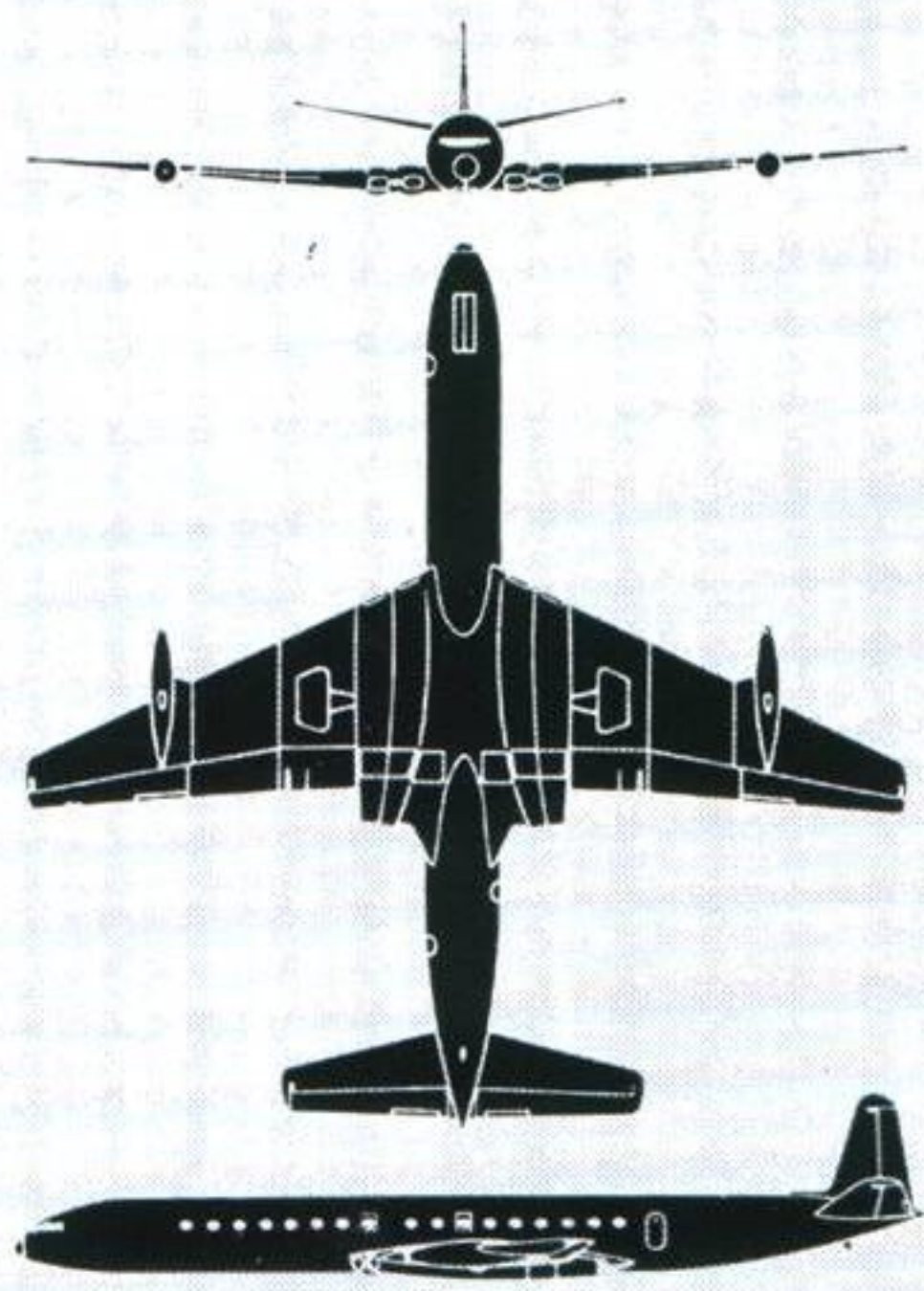


BISON This Russian long-range strategic bomber exists in two versions—as photo and modified with a nose similar to Bear B; the latter version can carry a Kangaroo stand-off bomb. Span 170 feet



COMET 4B With a cropped wing and lengthened fuselage this is a medium range version of the Comet. Span 108 feet

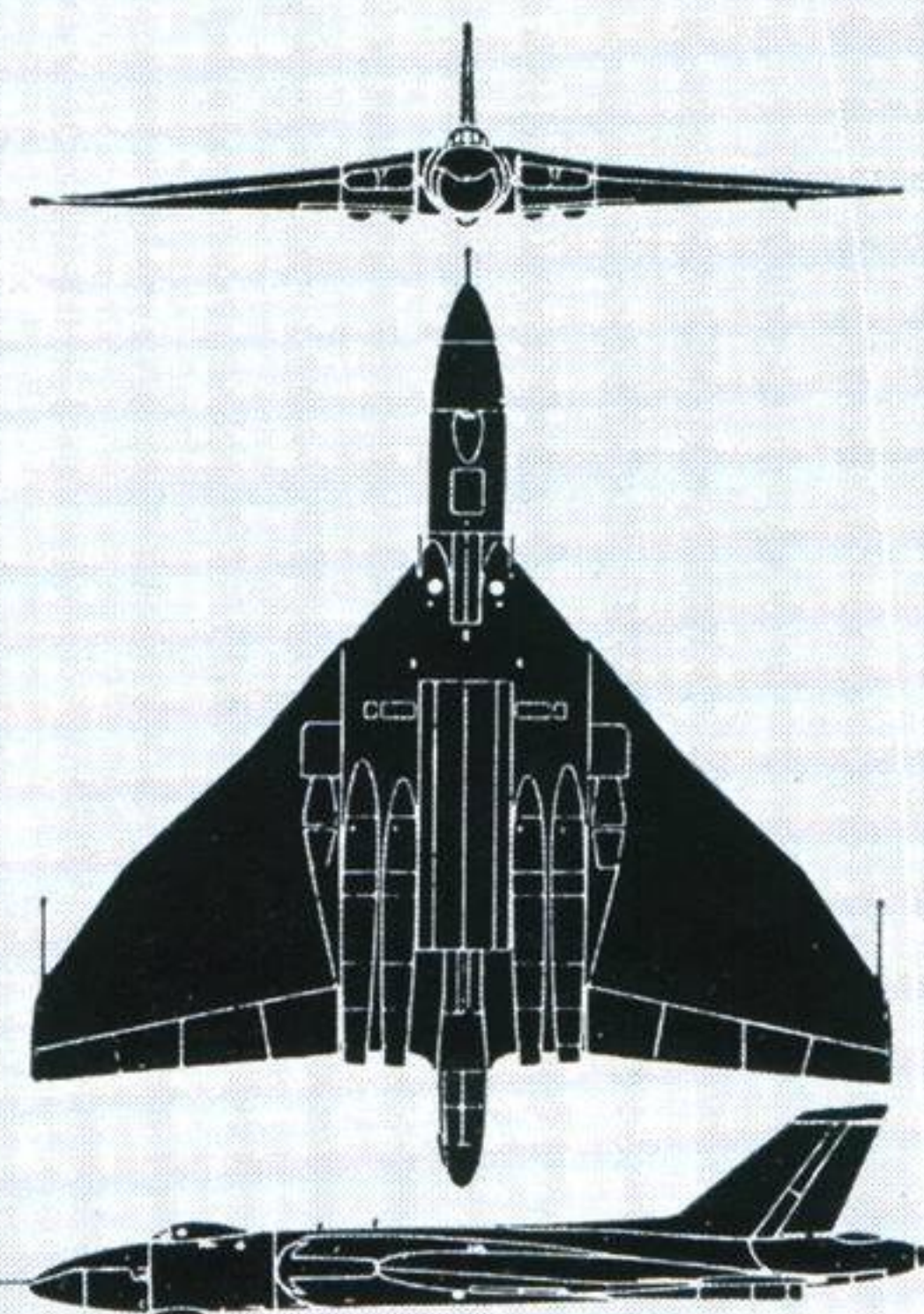




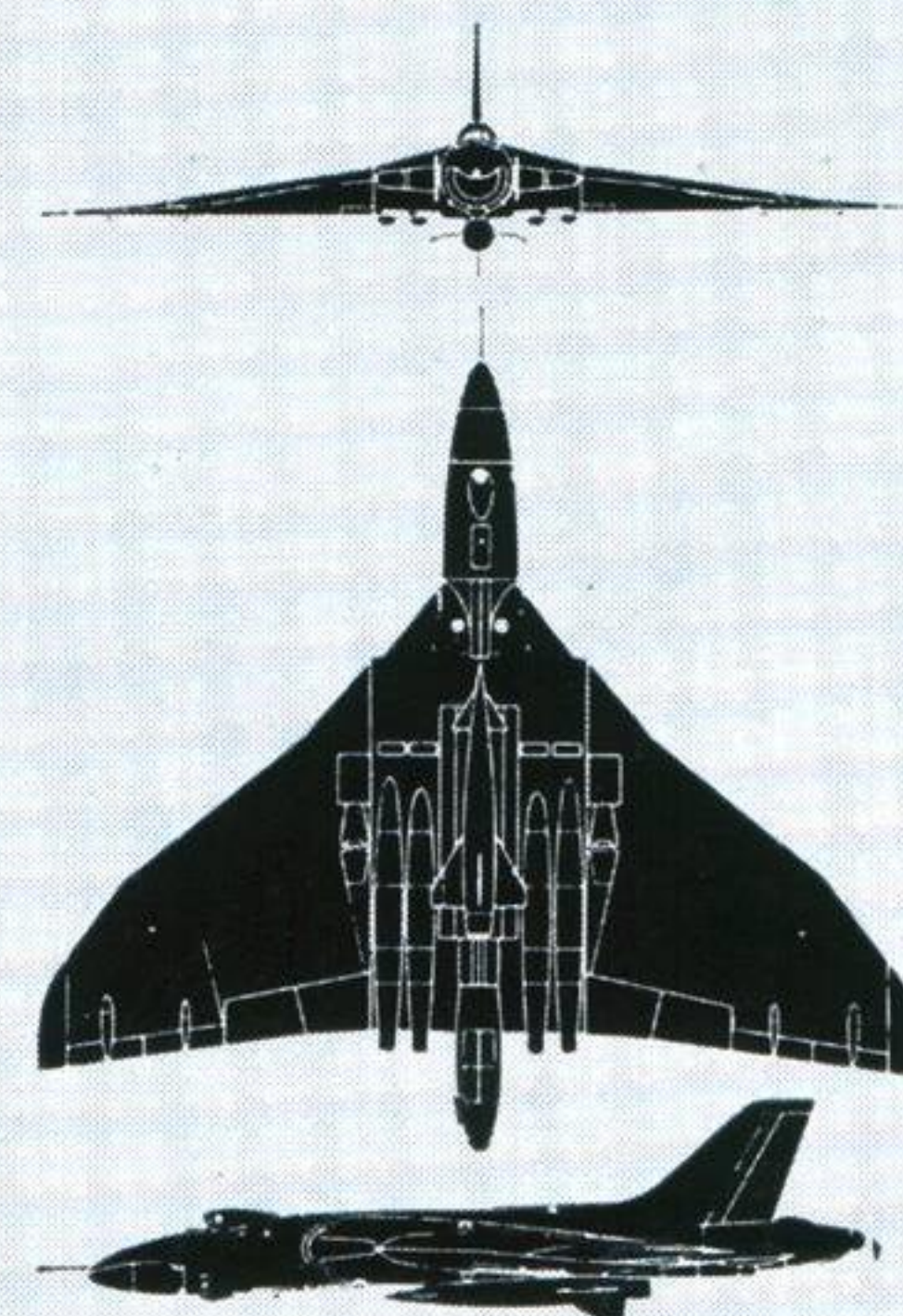
COMET 4C This long-range Comet is coming into R.A.F. service as the Comet C.4C. The Comet 4 version, while retaining the wing tanks of the 4C, has a shorter fuselage. Span 115 feet



VALIANT First of the R.A.F.'s V-bombers, the Valiant has now been permanently grounded. Span 114 feet



VULCAN B.1 First service mark of this delta-wing "V" bomber in service with R.A.F. Bomber Command in two versions, B.1A with bulged tail cone and B.1 without. Span 99 feet



VULCAN B.2 Developed Vulcan capable of delivering Blue Steel missile, carried under fuselage as shown. Vulcans, like all three "V" bombers, are exclusive to the R.A.F. Span 111 feet



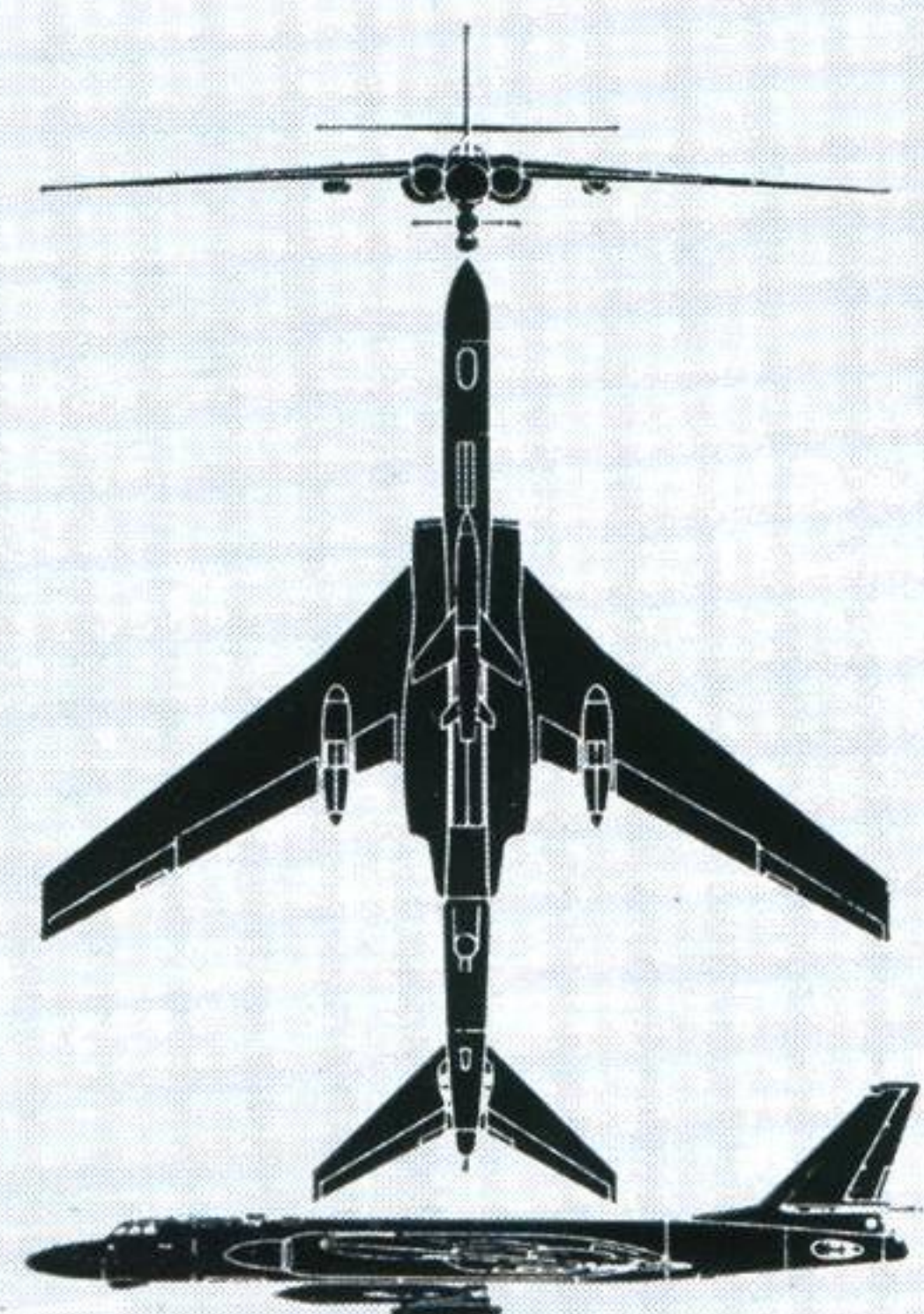
37



VICTOR B.1 The crescent winged "V" bomber, like Vulcan and Valiant, is exclusive to the R.A.F. Victors have a multi-role capability as bombers, tankers or reconnaissance aircraft. Span 110 feet



VICTOR B.2 Developed Victor with increased span, larger intakes and capable of delivering the Blue Steel stand-off weapon. Span 120 feet



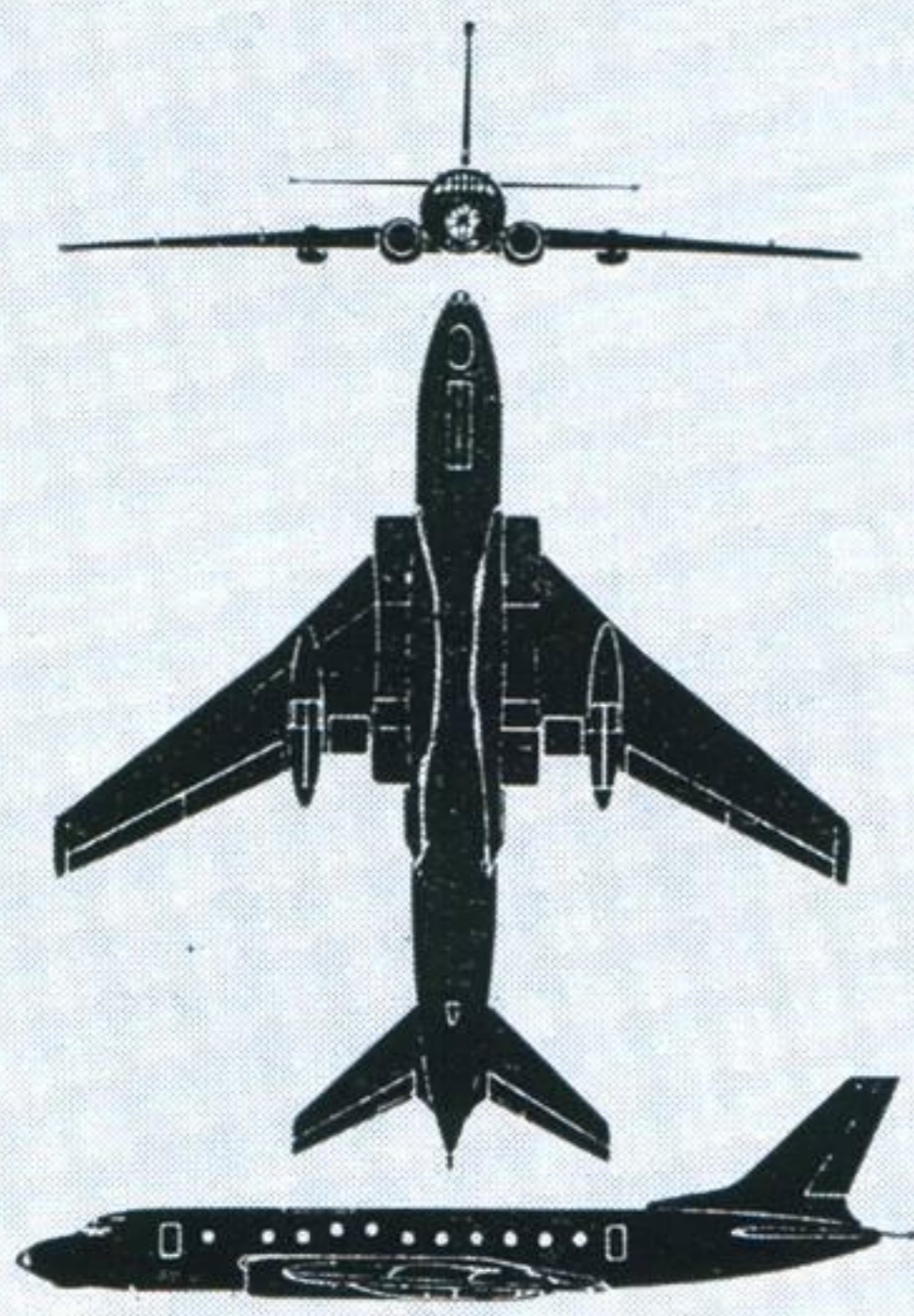
BADGER According to version (note variations in nose between photo and silhouette views) this Russian swept-wing jet bomber may carry under-wing or under-fuselage missiles. Span 110 feet



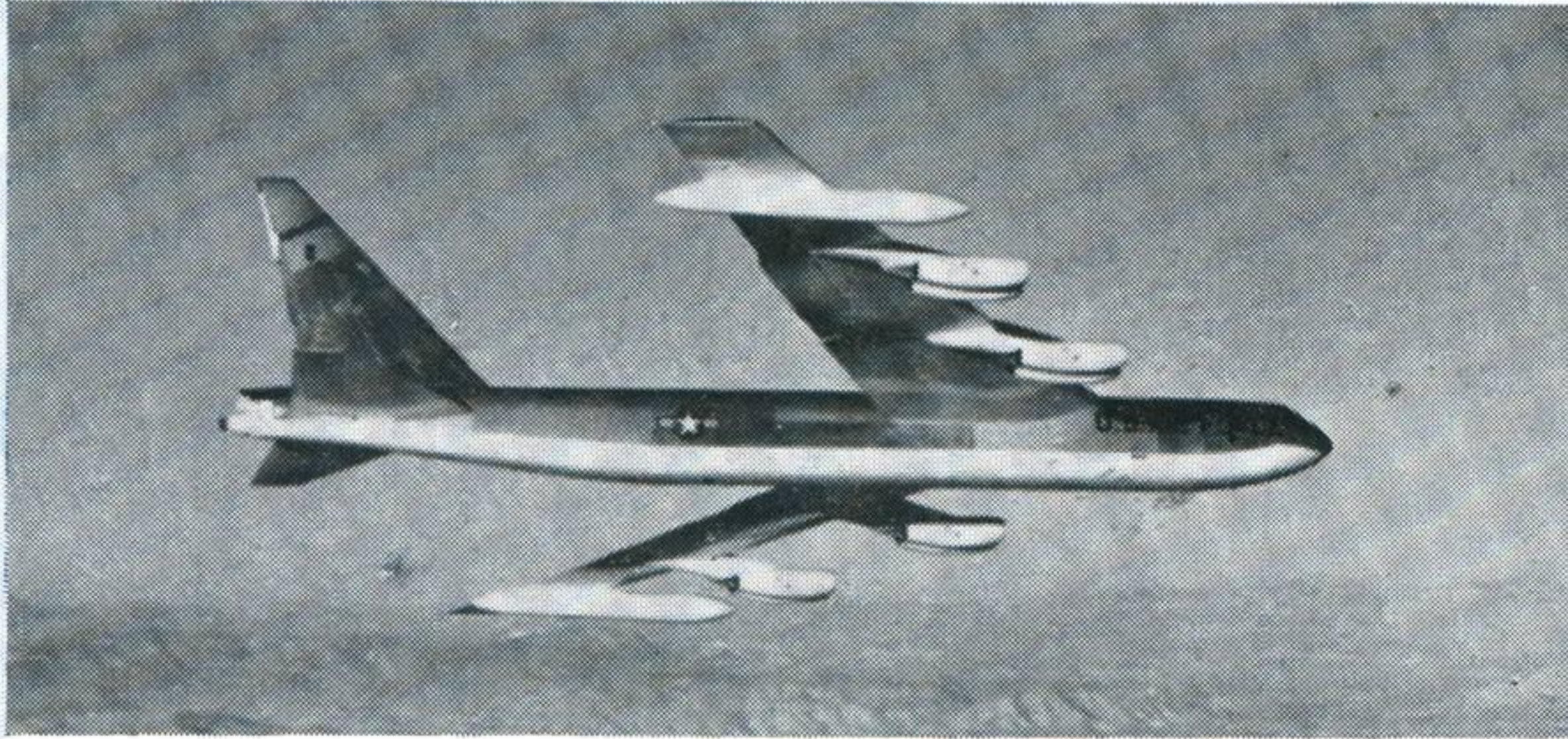
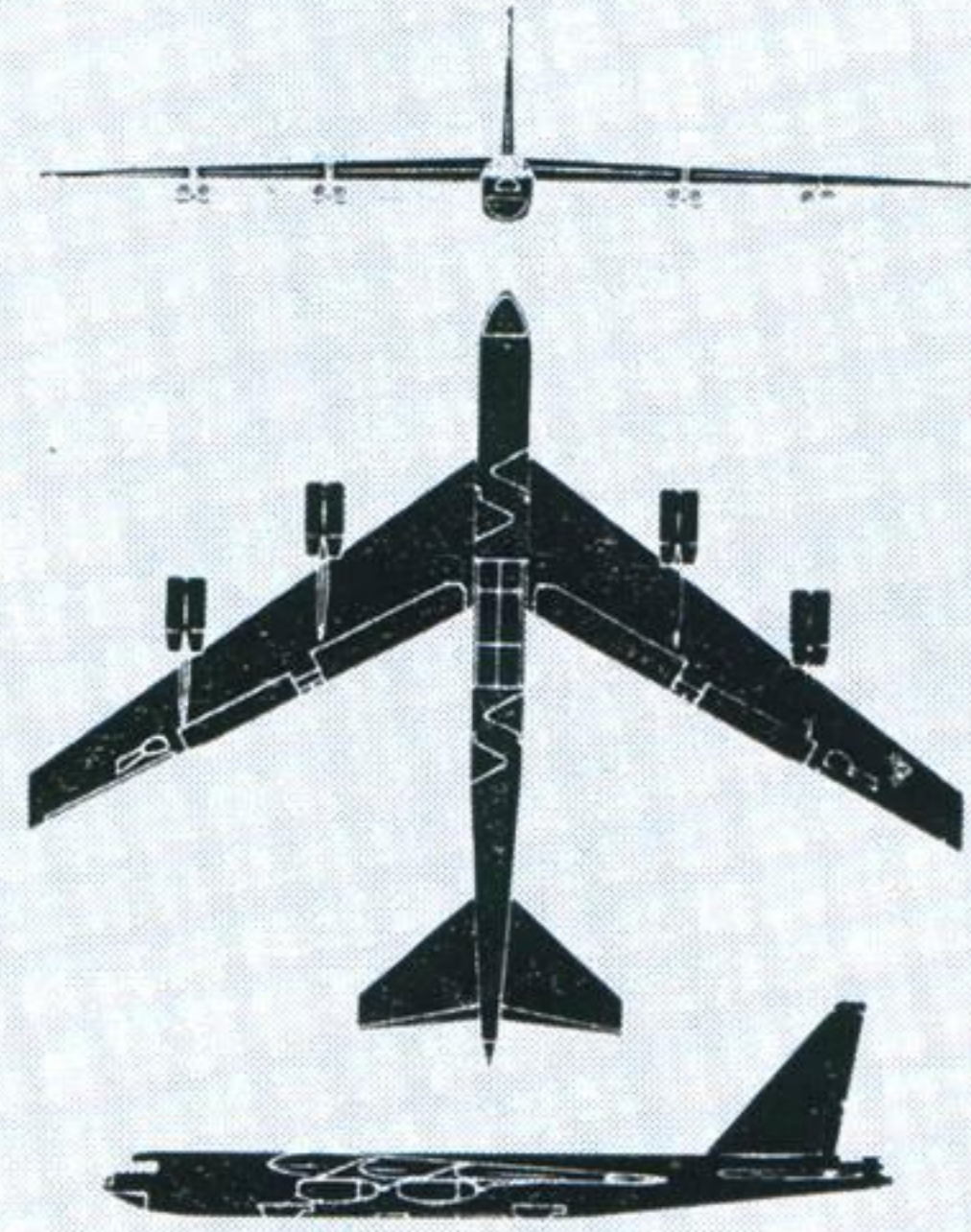
CAMEL Civil counterpart of Badger, this Aeroflot Tu-104 airliner is produced in several versions with variations of a few feet in fuselage length. Span 113 feet



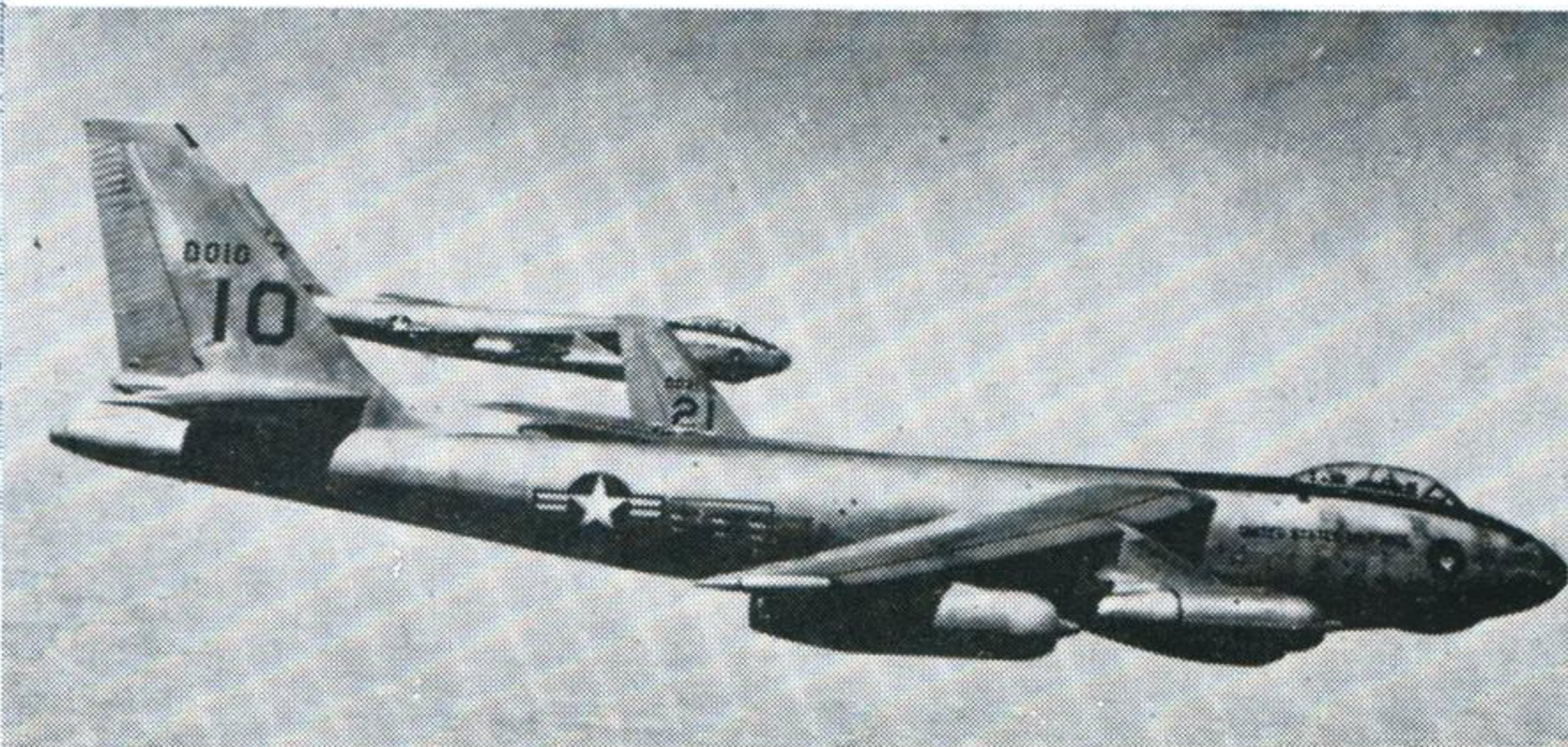
March 1965



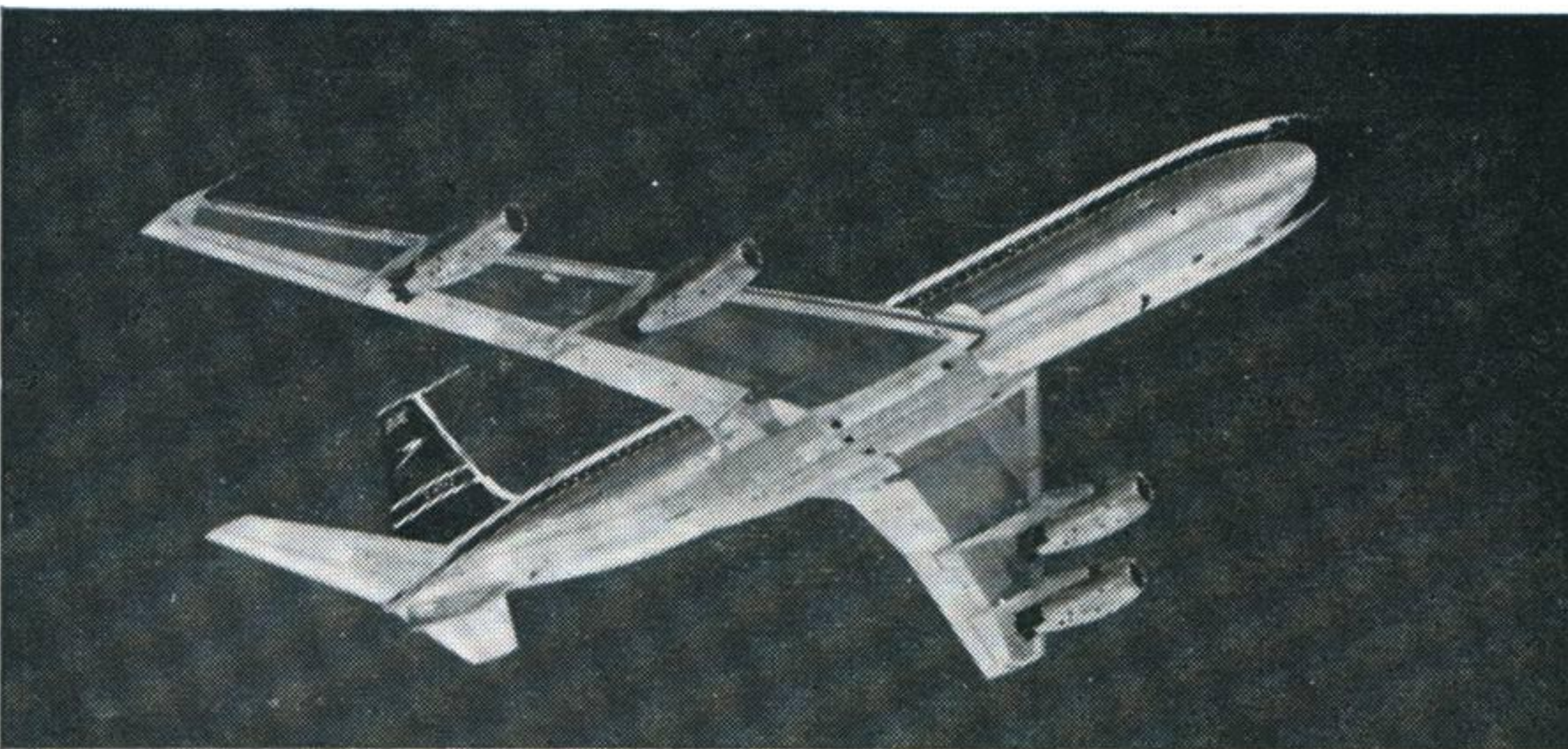
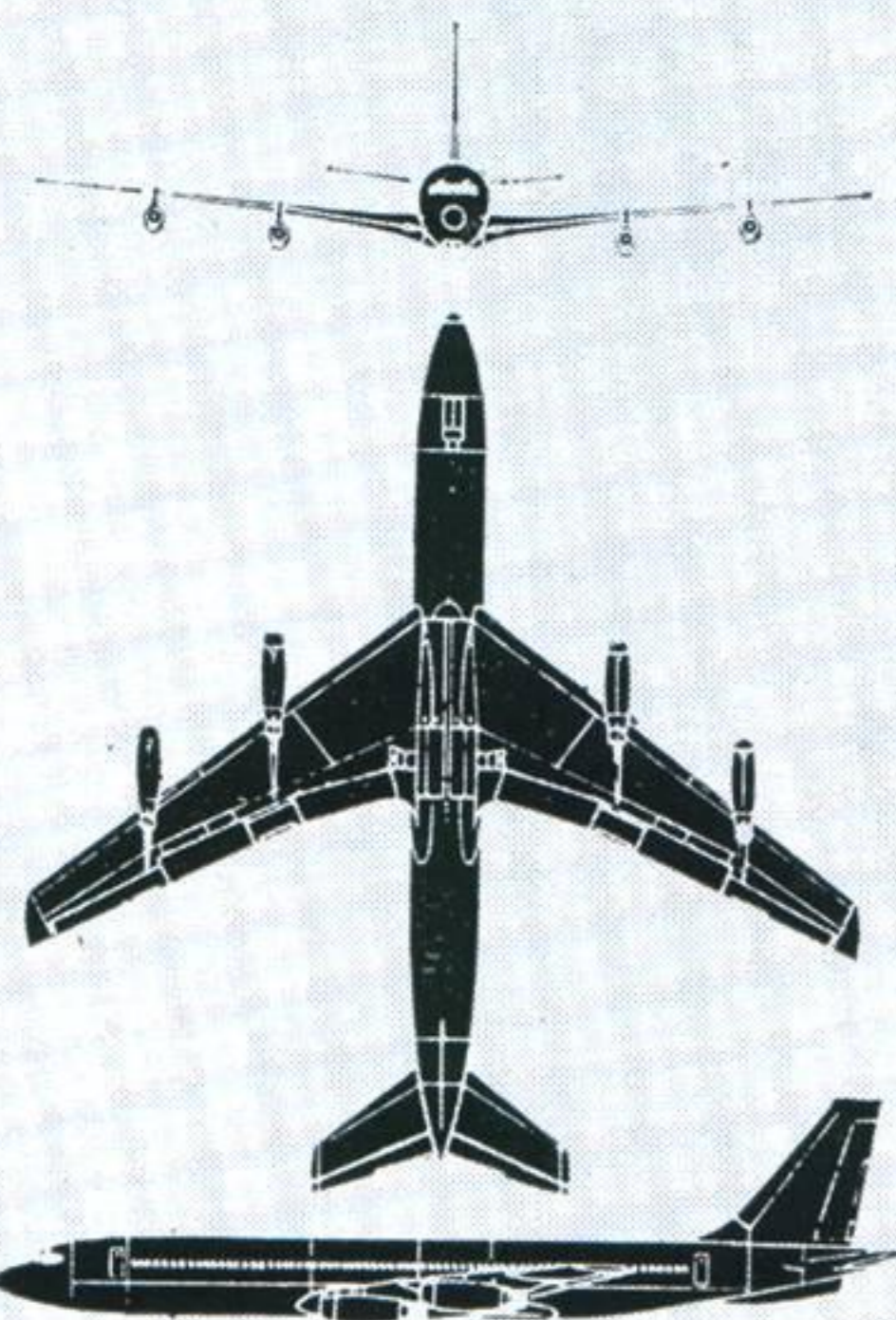
COOKPOT In effect this Tu124 is a scaled down version of Camel (see page 37) used almost exclusively on Russian internal airlines. Span 84 feet



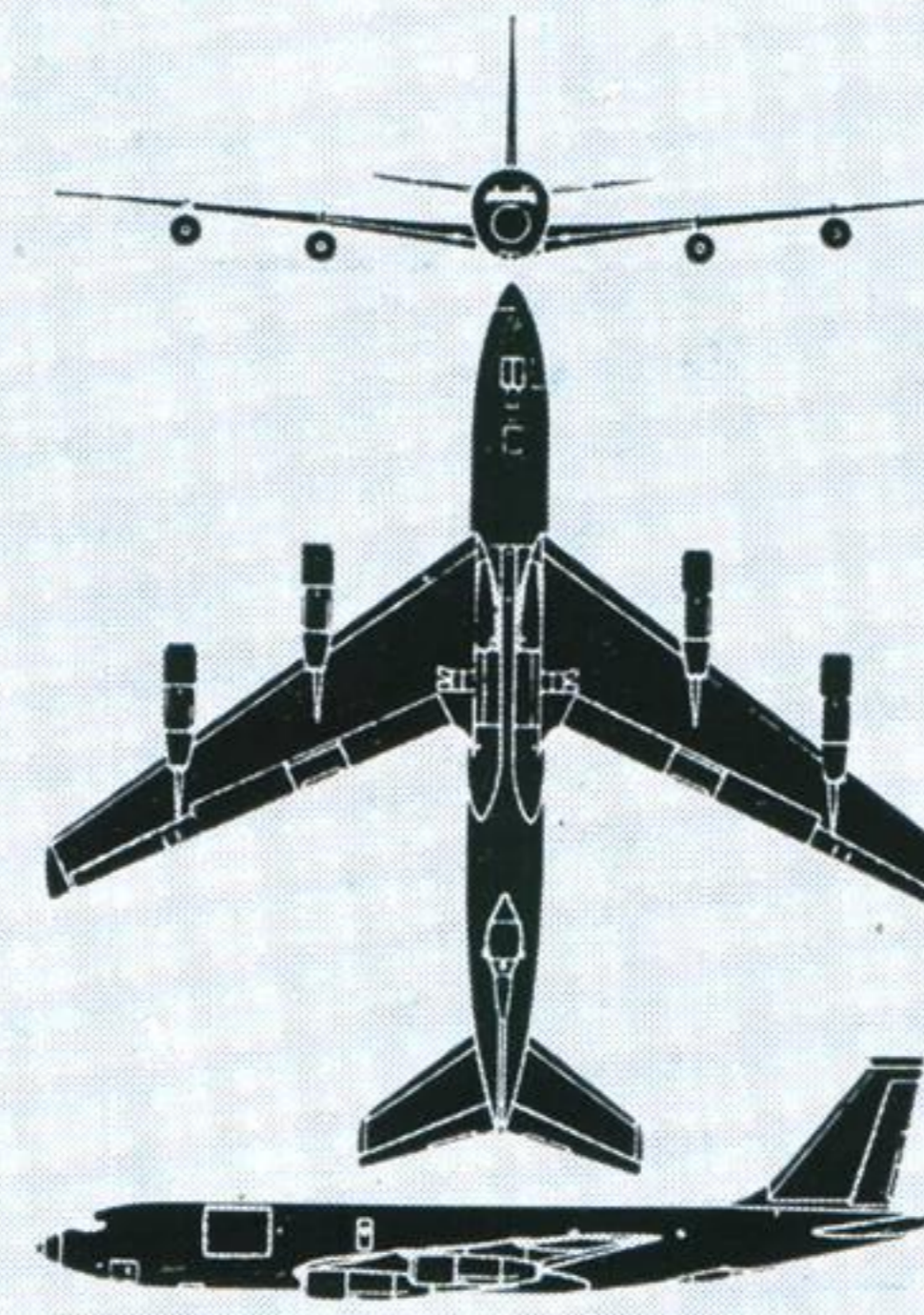
STRATOFORTRESS The B-52A to B-52E versions of this U.S.A.F. strategic bomber are characterised by the high tail fin. Span 185 feet



STRATOJET This U.S.A.F. B-47 strategic bomber, in service at present, is subject to a phased withdrawal plan. Span 123 feet



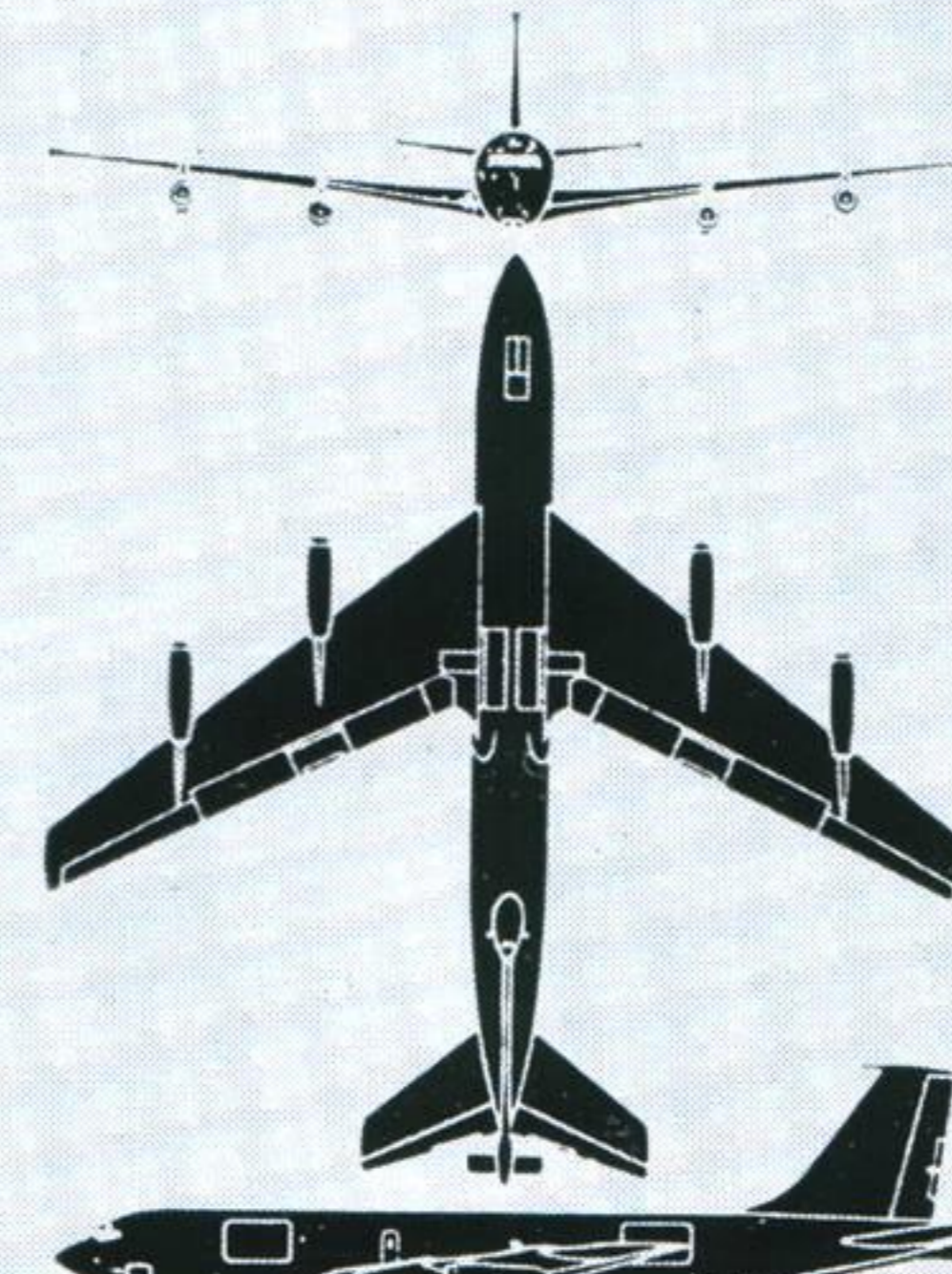
BOEING 707 A familiar airliner, world-wide, with fuselage variations of ten feet according to series. Span 142 feet



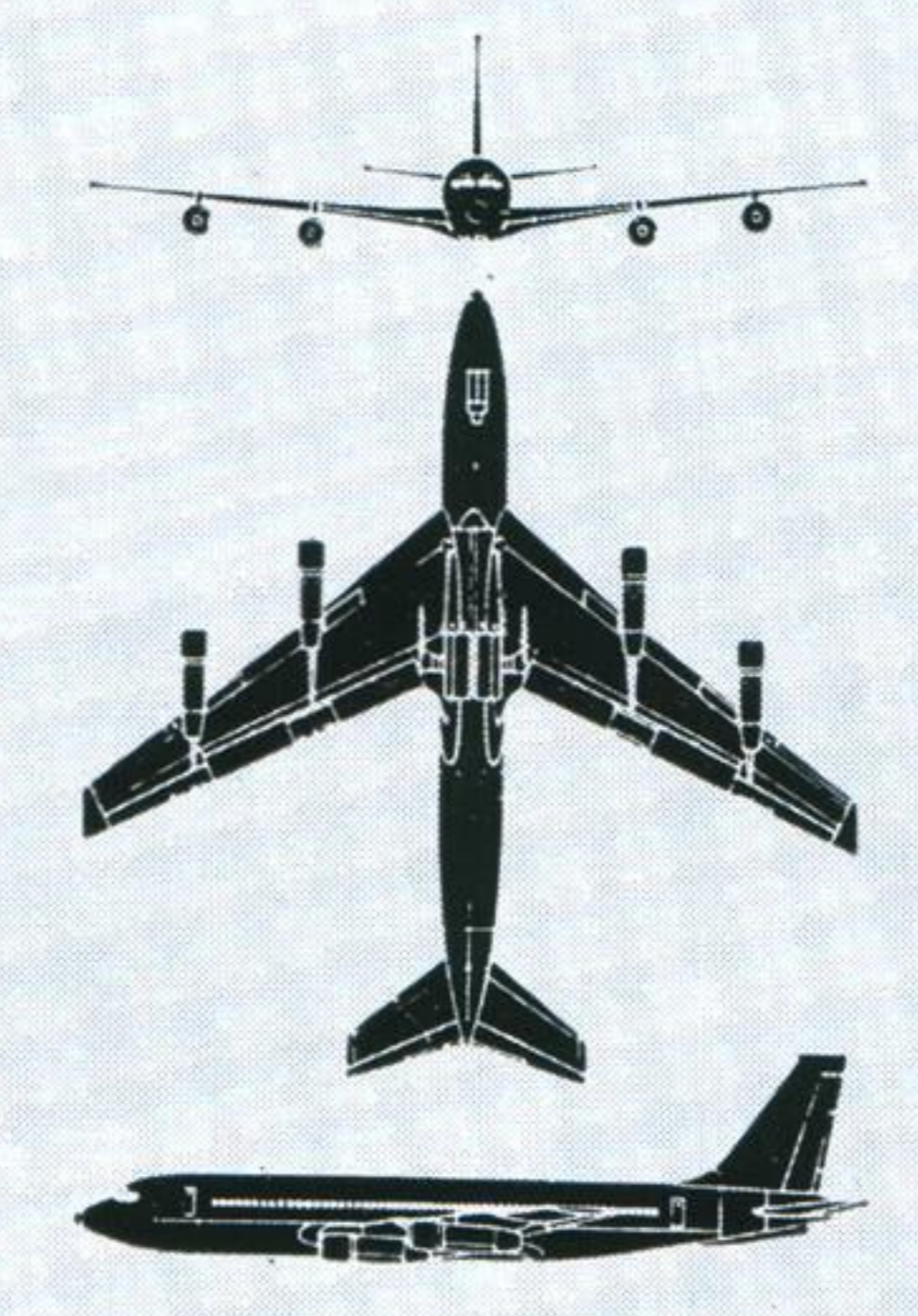
STRATOLIFTER With the same origins as the well-known Boeing 707 (see below) these military transports, capable of accommodating 126 troops each, are in U.S.A.F. service as the C-135. Span 131 feet



STRATOFORTRESS B-52F to B-52H versions of this U.S.A.F. strategic bomber have cropped tailfins and the B-52G/H versions can carry Hound Dog missiles from under-wing pylons. Span 185 feet



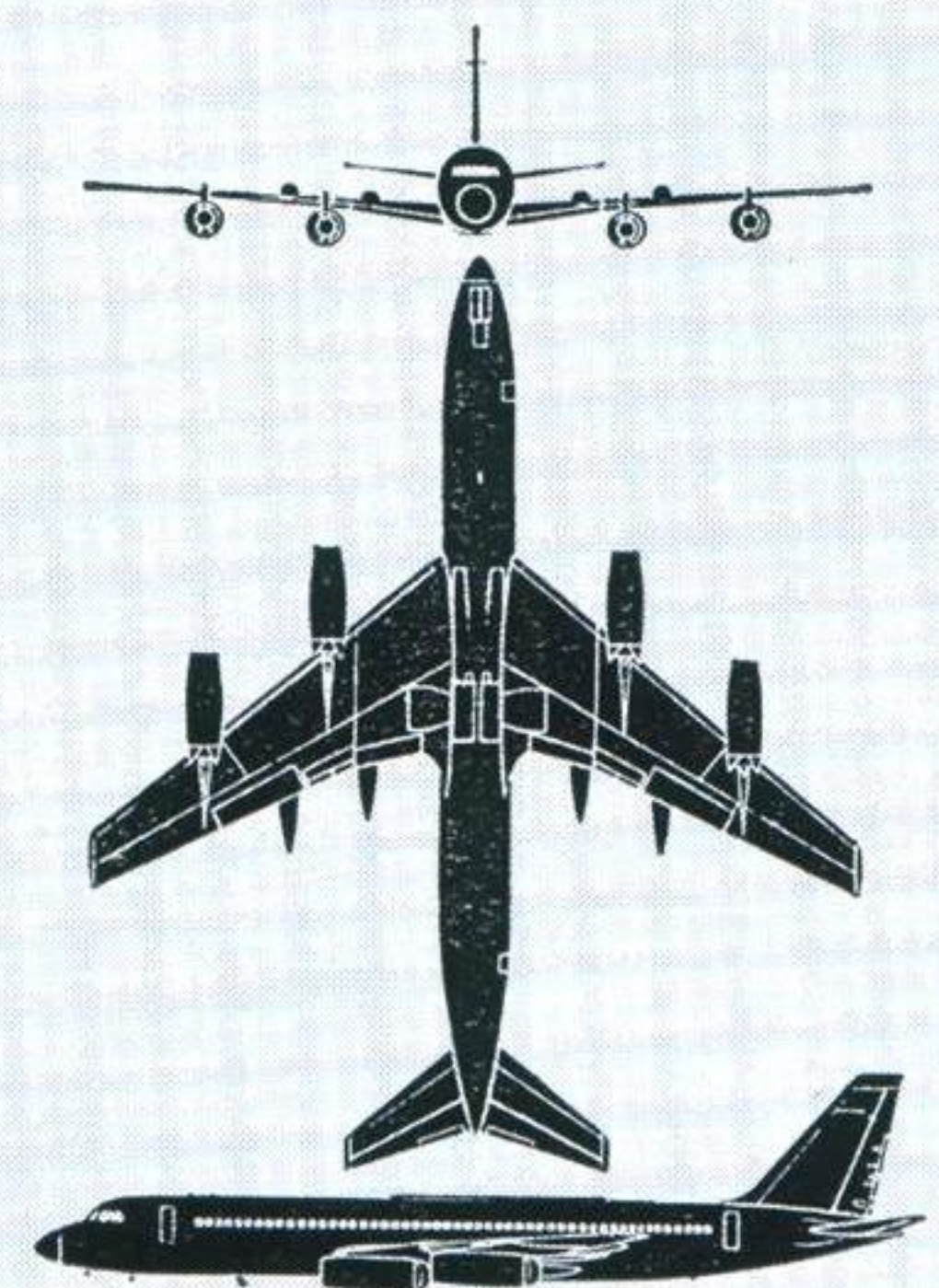
STRATOTANKER From the basic Boeing 707 airliner design, the KC-135A serves the U.S.A.F. as a tanker or long-range transport. Several hundreds are in service. Span 131 feet



BOEING 720 Outlined similar to the 707 with structural differences, the 720 series have minor differences in engine nacelle shapes according to the power plant fitted. Span 131 feet



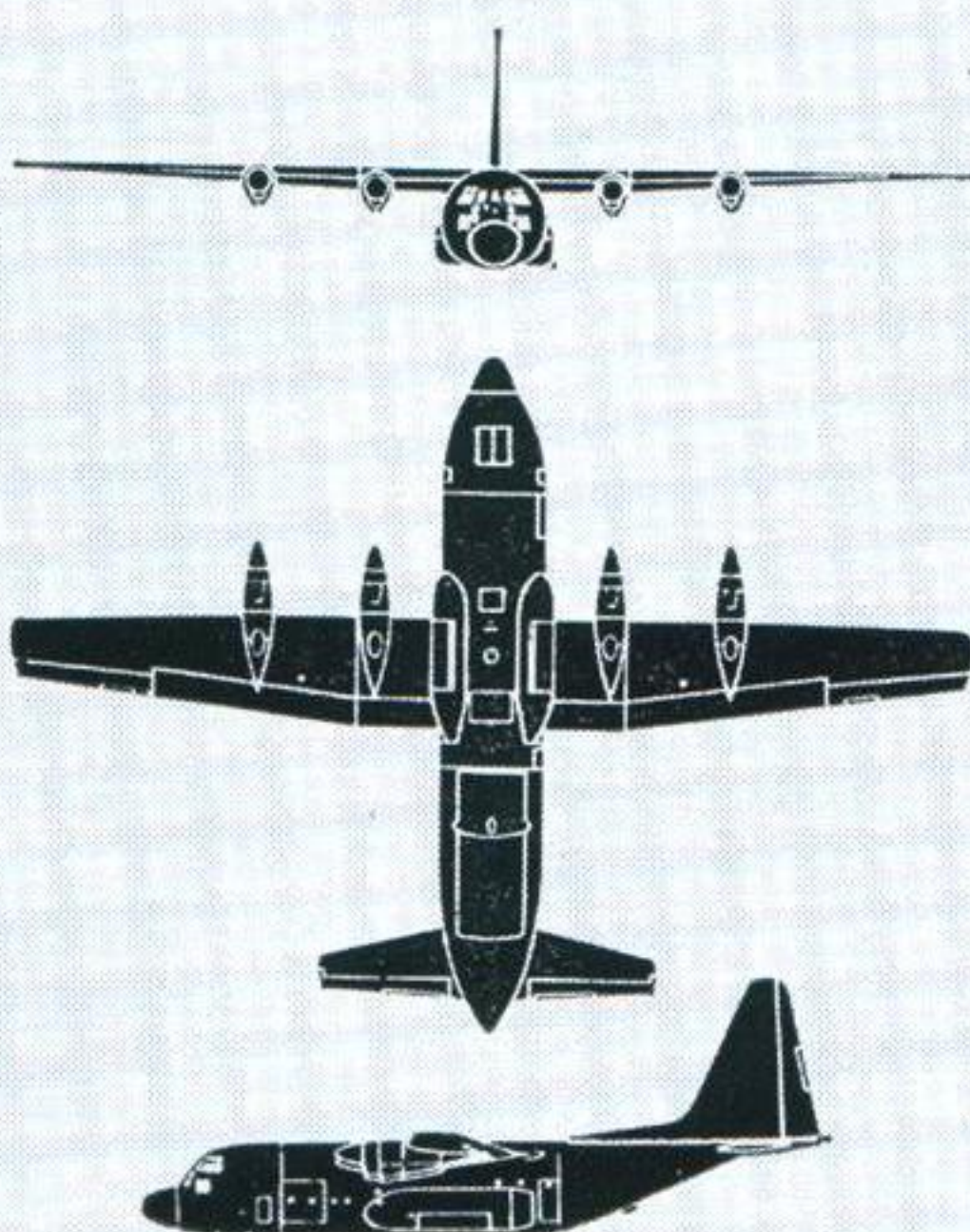
DC-8 Carrying in its several versions up to 173 passengers, the DC-8 series all have the same basic outline which, purely coincidentally, is very similar to the Boeing 707 series. Span 142 feet



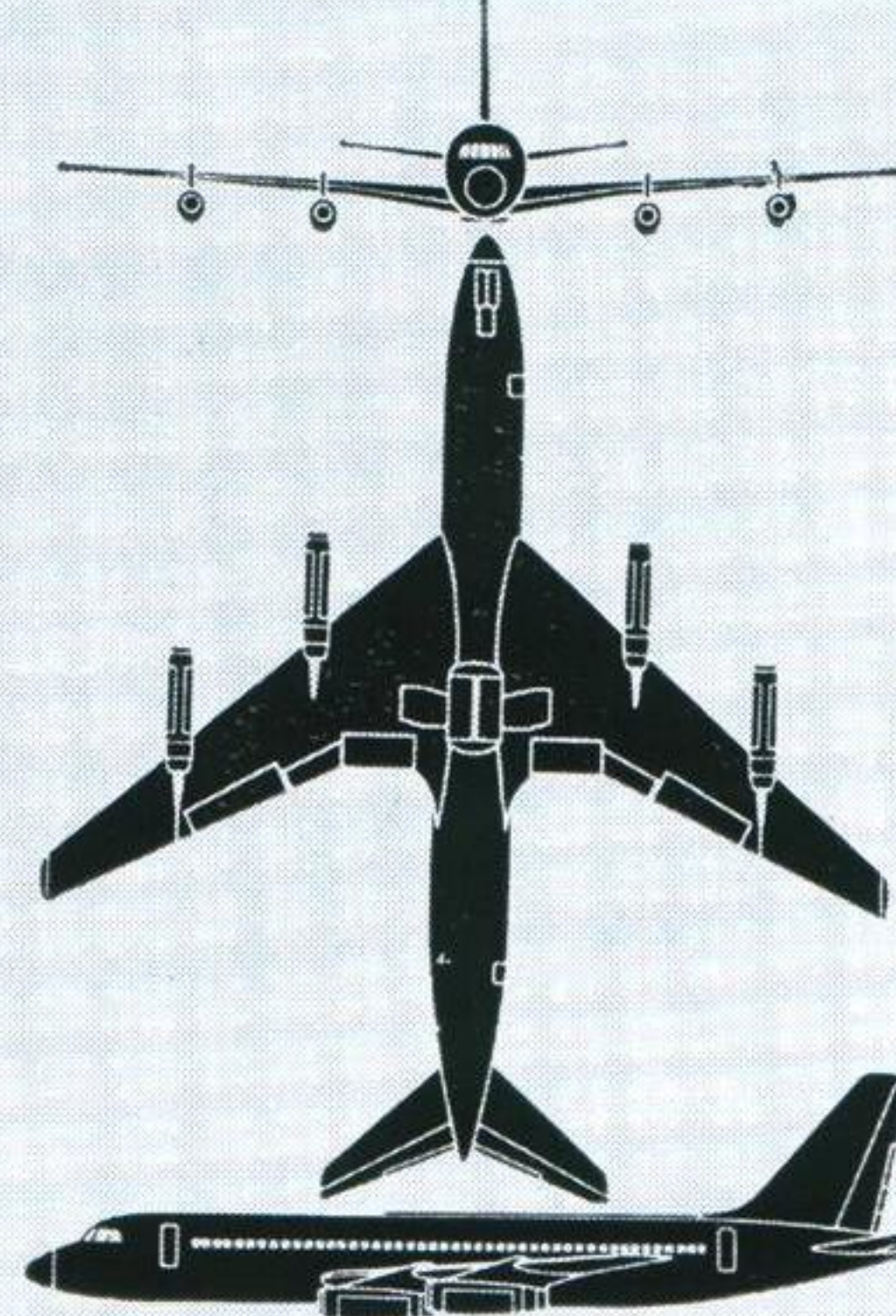
CONVAIR 990A Developed from the Convair 880, the 990 has a large fuselage with increased accommodation. Modifications prior to service has resulted in the designation 990A. Span 120 feet



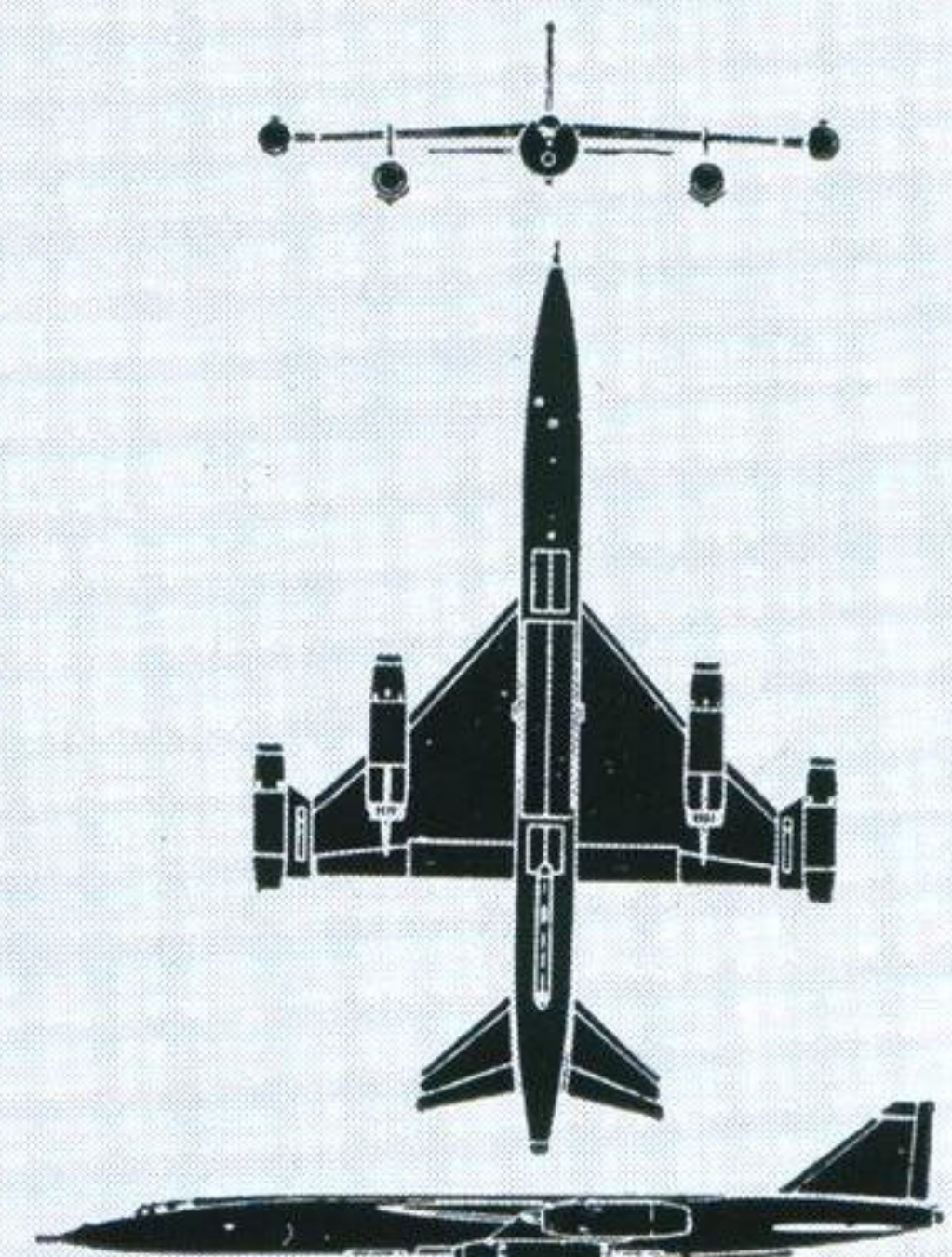
HUSTLER A long-range medium bomber in U.S.A.F. service is their B-58A. Eight have been converted to TB-58A dual control trainers with revised canopy. Span 57 feet



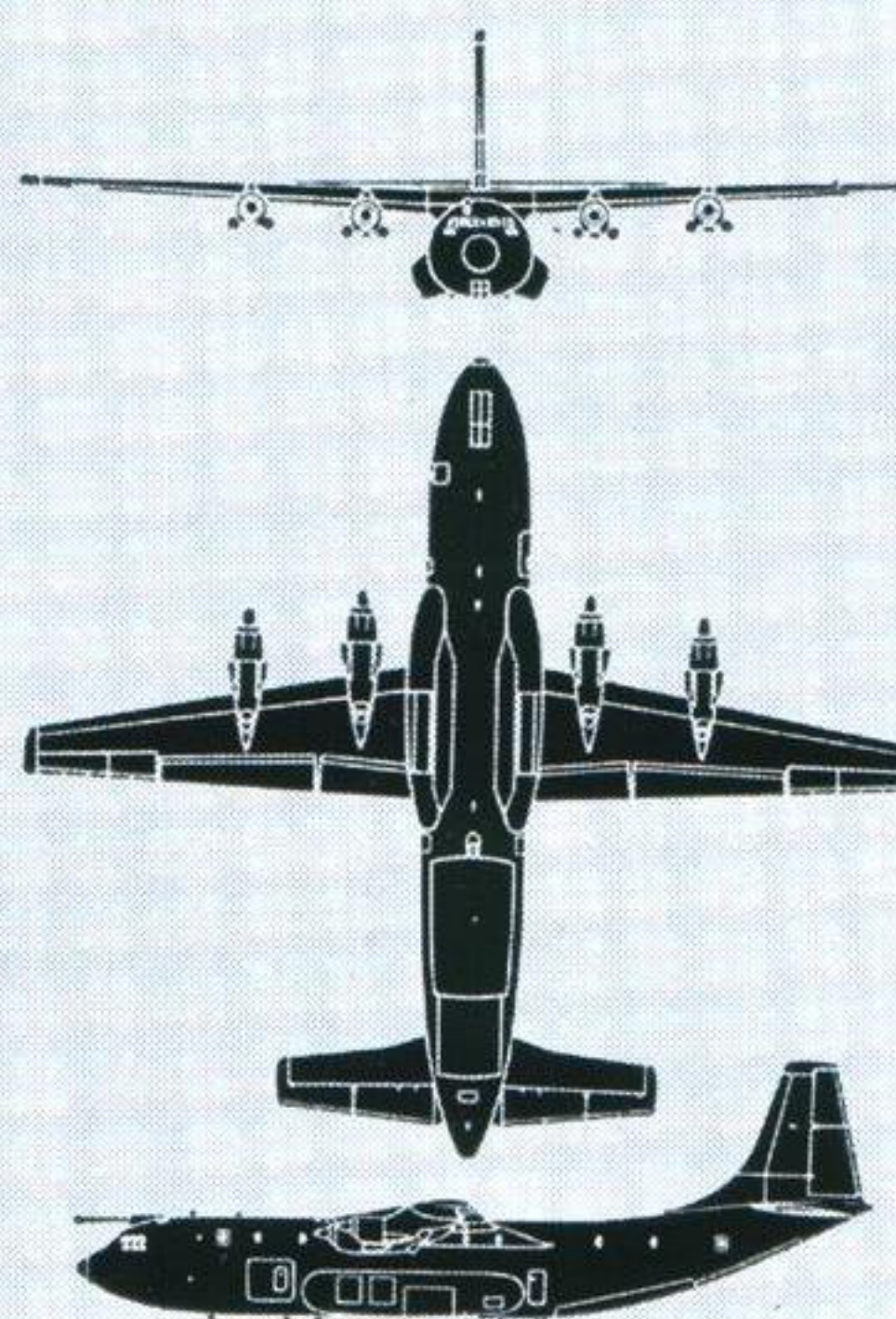
HERCULES U.S.A.F. standard transport, the C-130 Hercules, is built in several versions and is in use in the R.C.A.F., R.A.A.F. and S.A.A.F. as well as the air arms of Iran, Indonesia and Pakistan. Span 133 feet



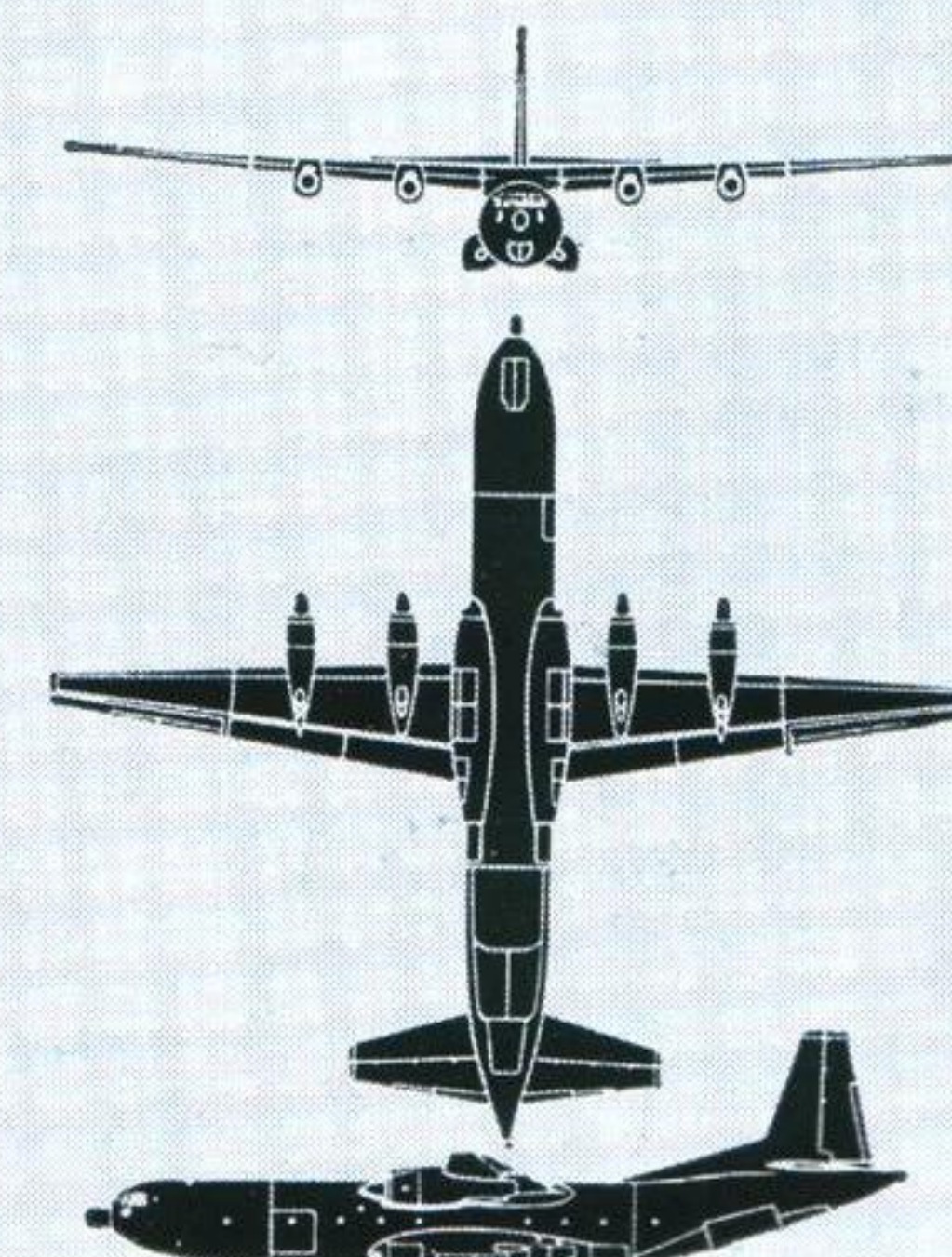
CONVAIR 880 This medium American airliner is used by several airlines world-wide and is produced in the 880 and 880-M versions with variations mainly in detail items. Span 120 feet



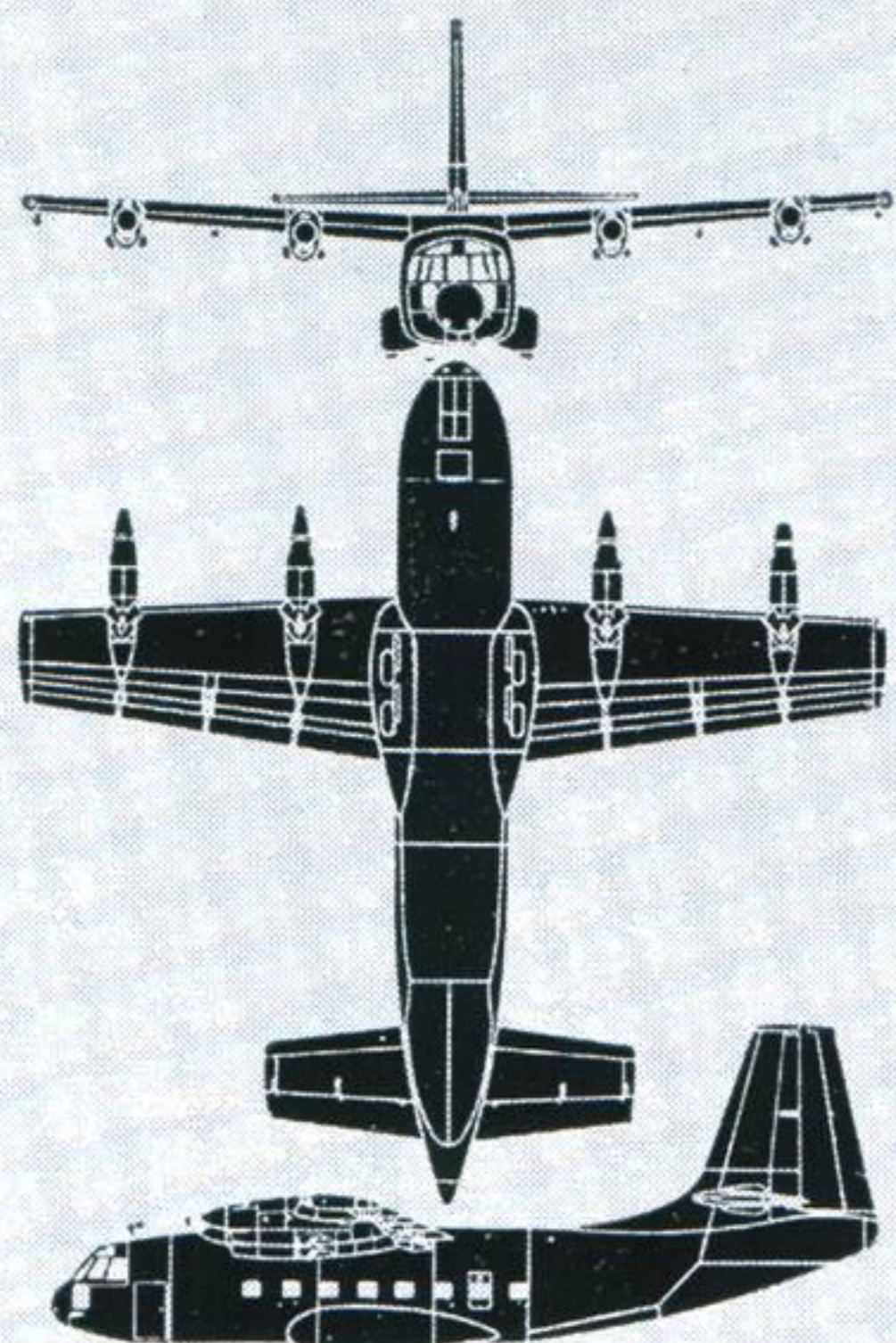
BOUNDER This Russian bomber has been under development some years and may have flown in other modified forms. Span (estimated) 130-135 feet



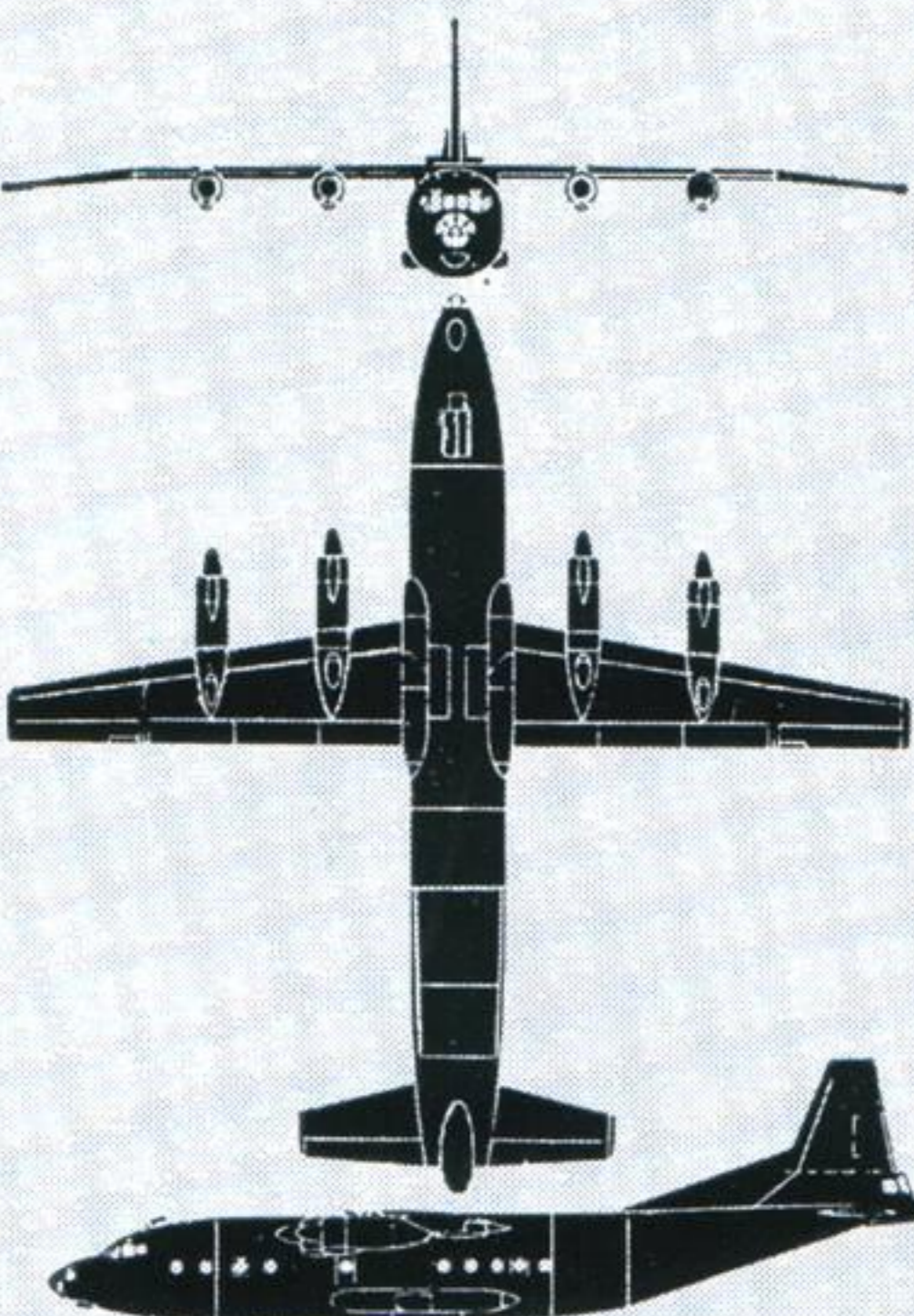
BELFAST R.A.F. Transport Command's latest freighter which is expected in service this year. It can carry several vehicles or helicopters up to a total of 81,000 lb. Span 159 feet



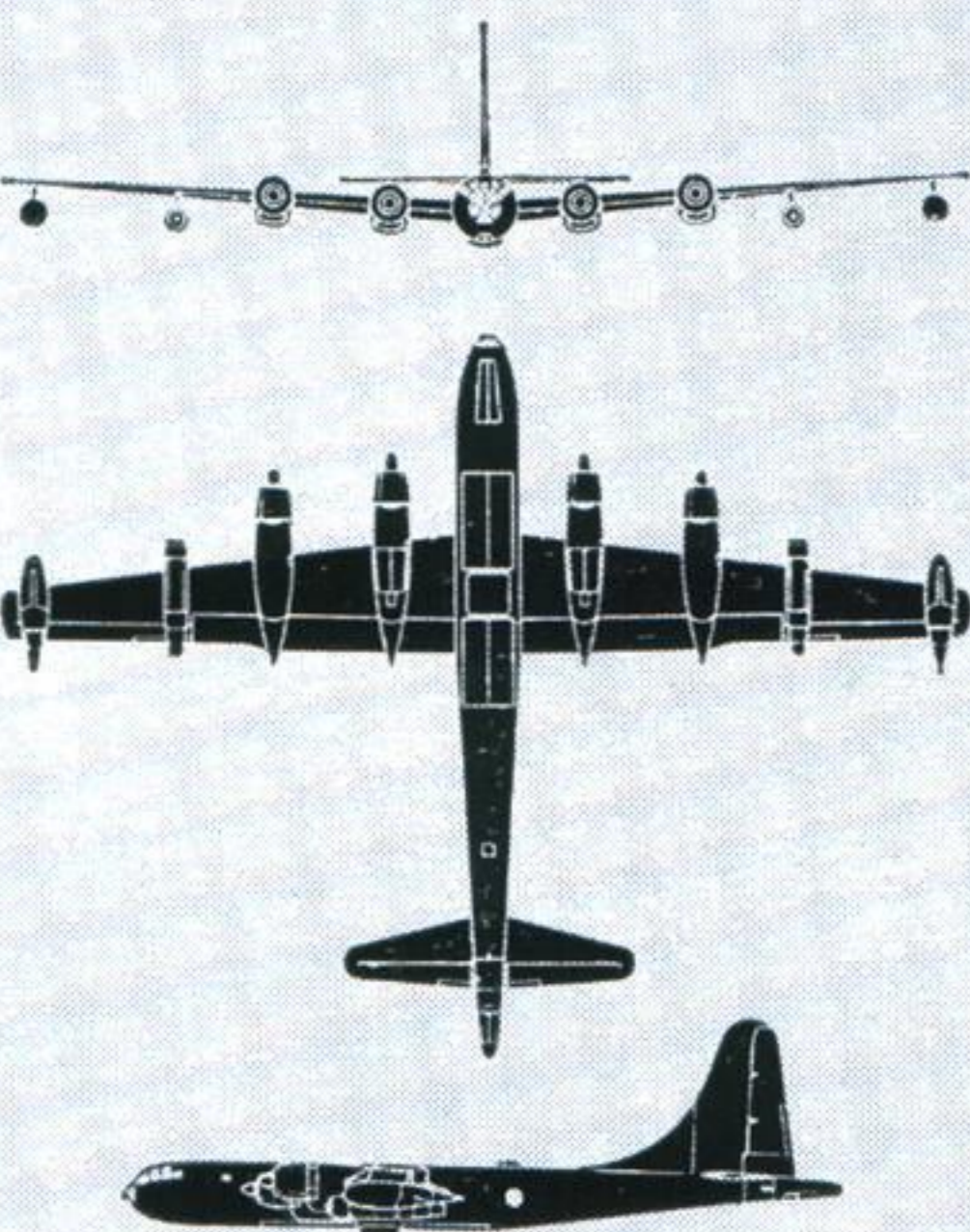
CARGOMASTER The Douglas C-133 Cargomaster, built in C-133A and C-133B versions of similar configuration, is exclusive to the U.S.A.F. Span 180 feet



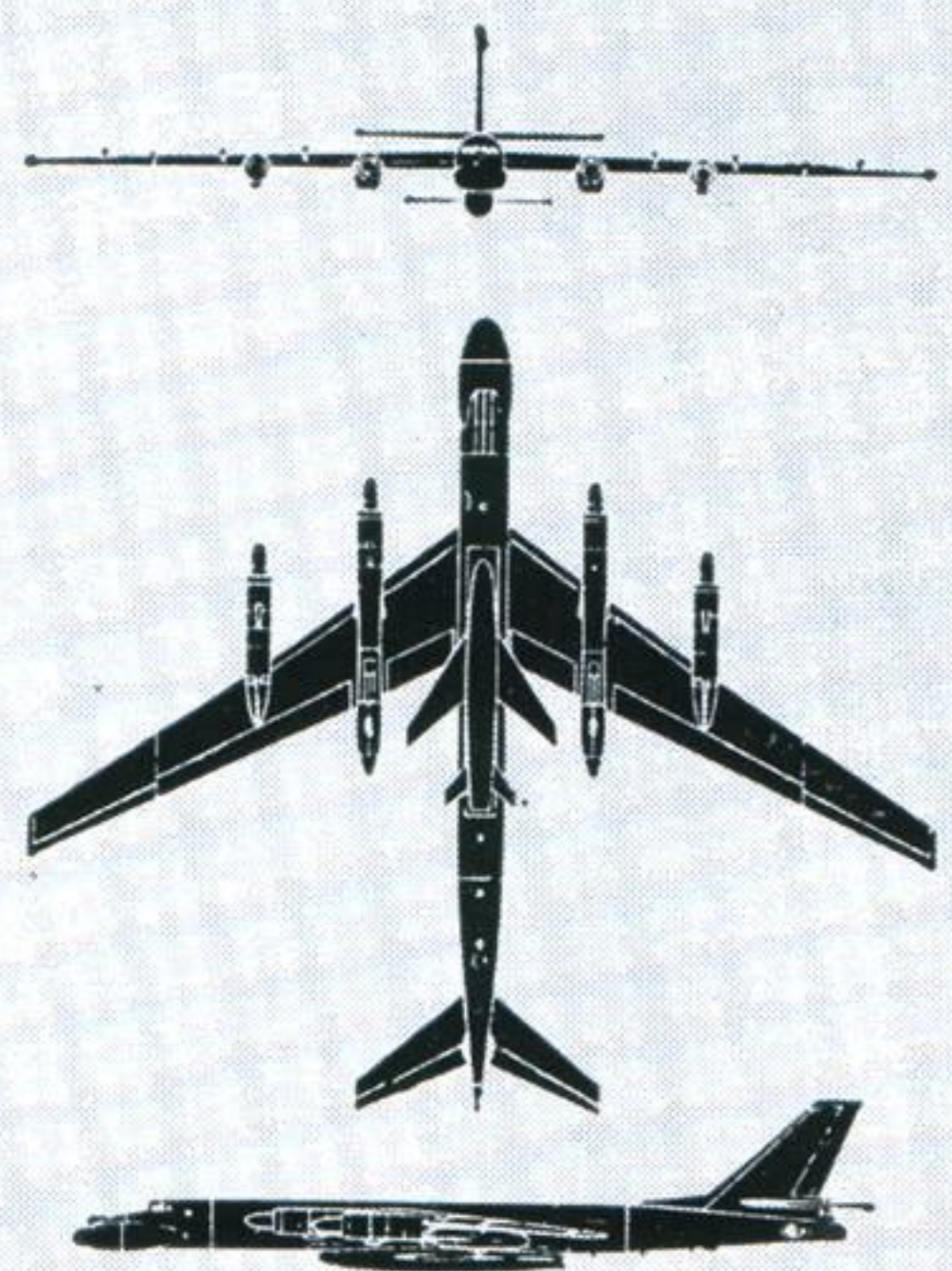
BREGUET 941 Prototype of a STOL tactical transport now in production, this French aircraft can accommodate up to sixty troops or alternatively vehicles, including some A.F.V. types. **Span 77 feet**



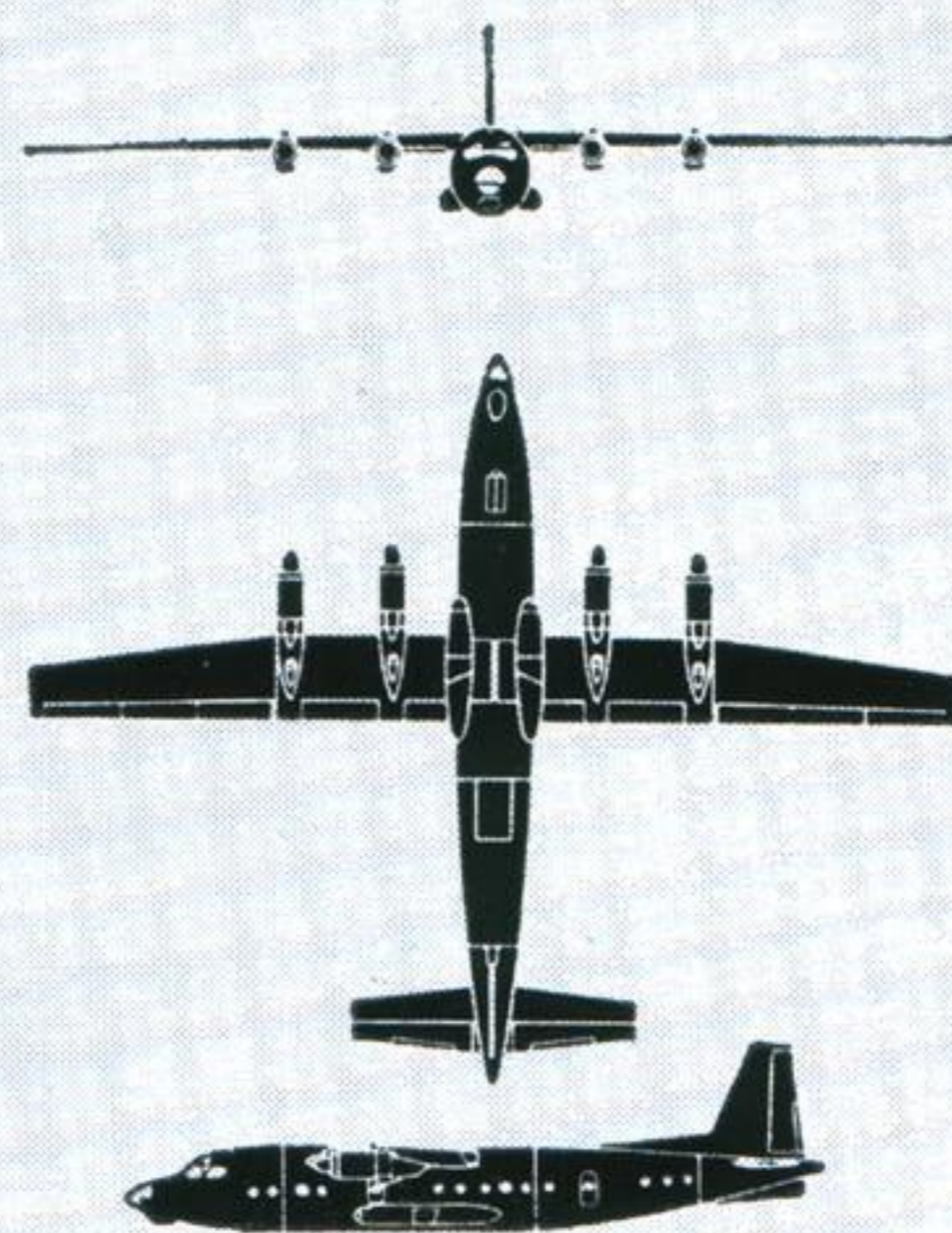
CUB Military development of Cat with raised tail to permit rear-loading, serving in Egyptian, Indian, Indonesian and Iraqi colours as well as with Red Star markings. **Span 125 feet**



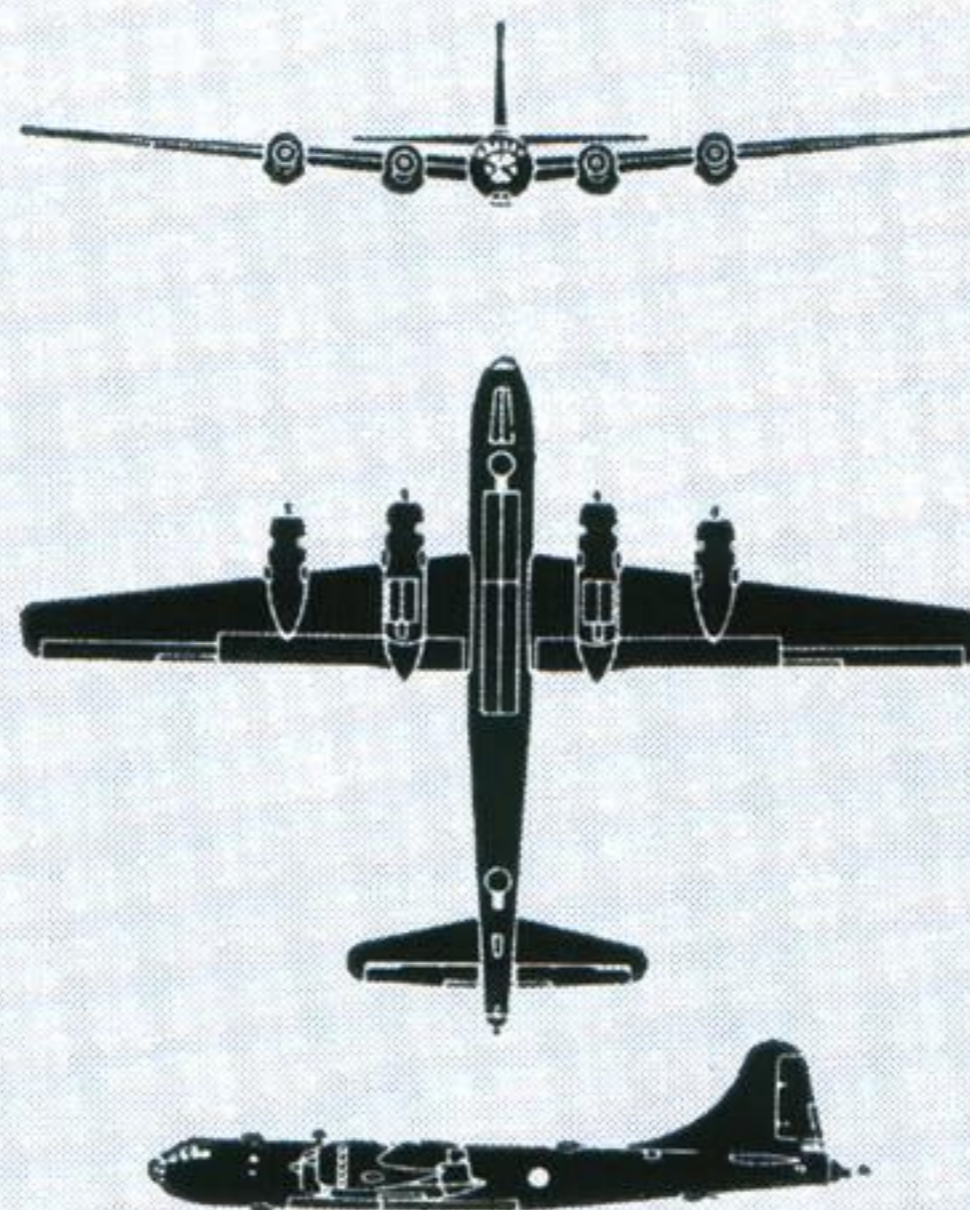
SUPERFORTRESS (B-50) A re-engined version of the B-29, the B-50 series have outlived their prime role, but a few are retained for refuelling, mapping and weather reconnaissance roles. **Span 141 feet**



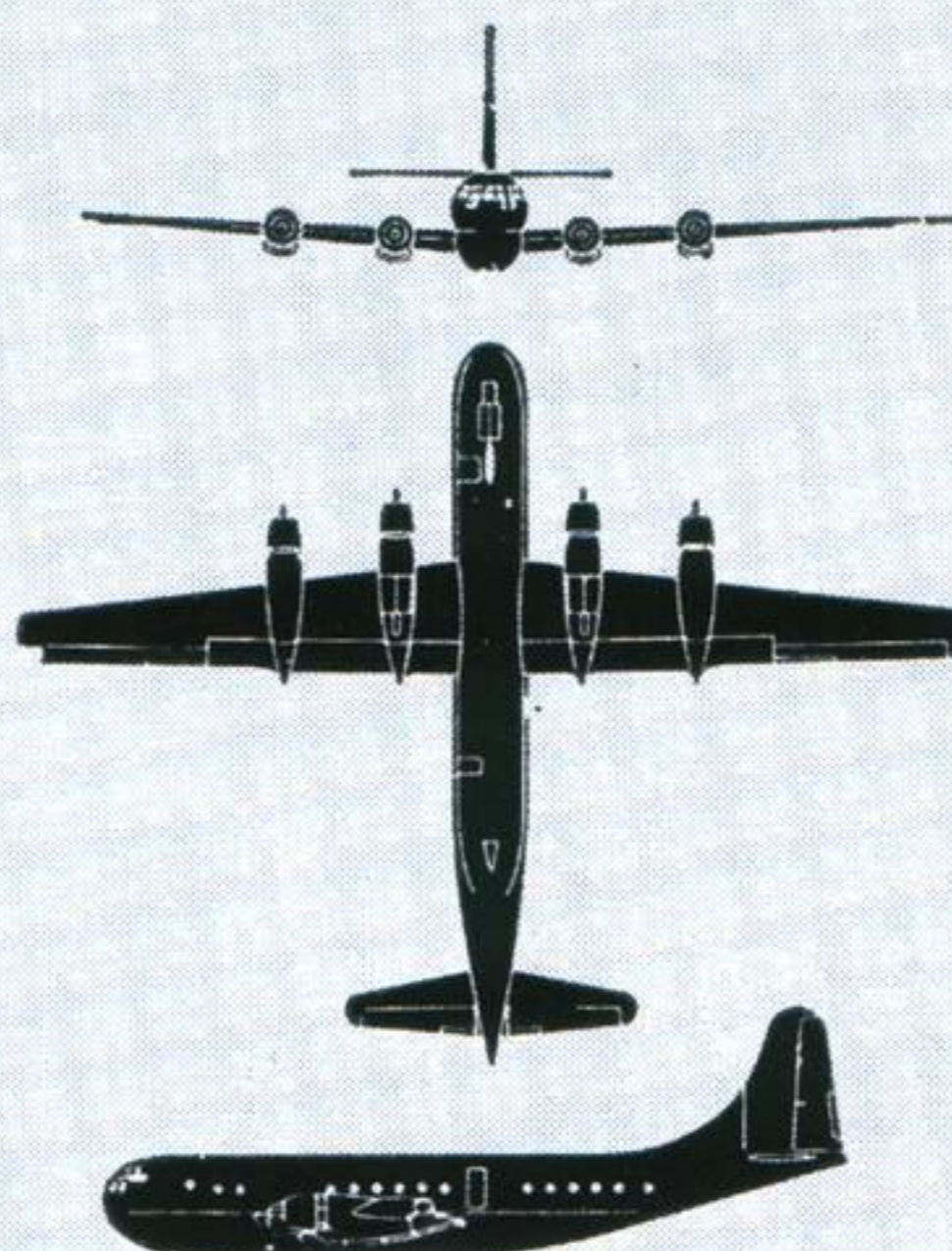
BEAR A and B This Russian Tu-95 bomber appears in two versions, A as in the photograph and B as in the silhouette view. The B version may carry an under-fuselage missile. **Span 167 feet**



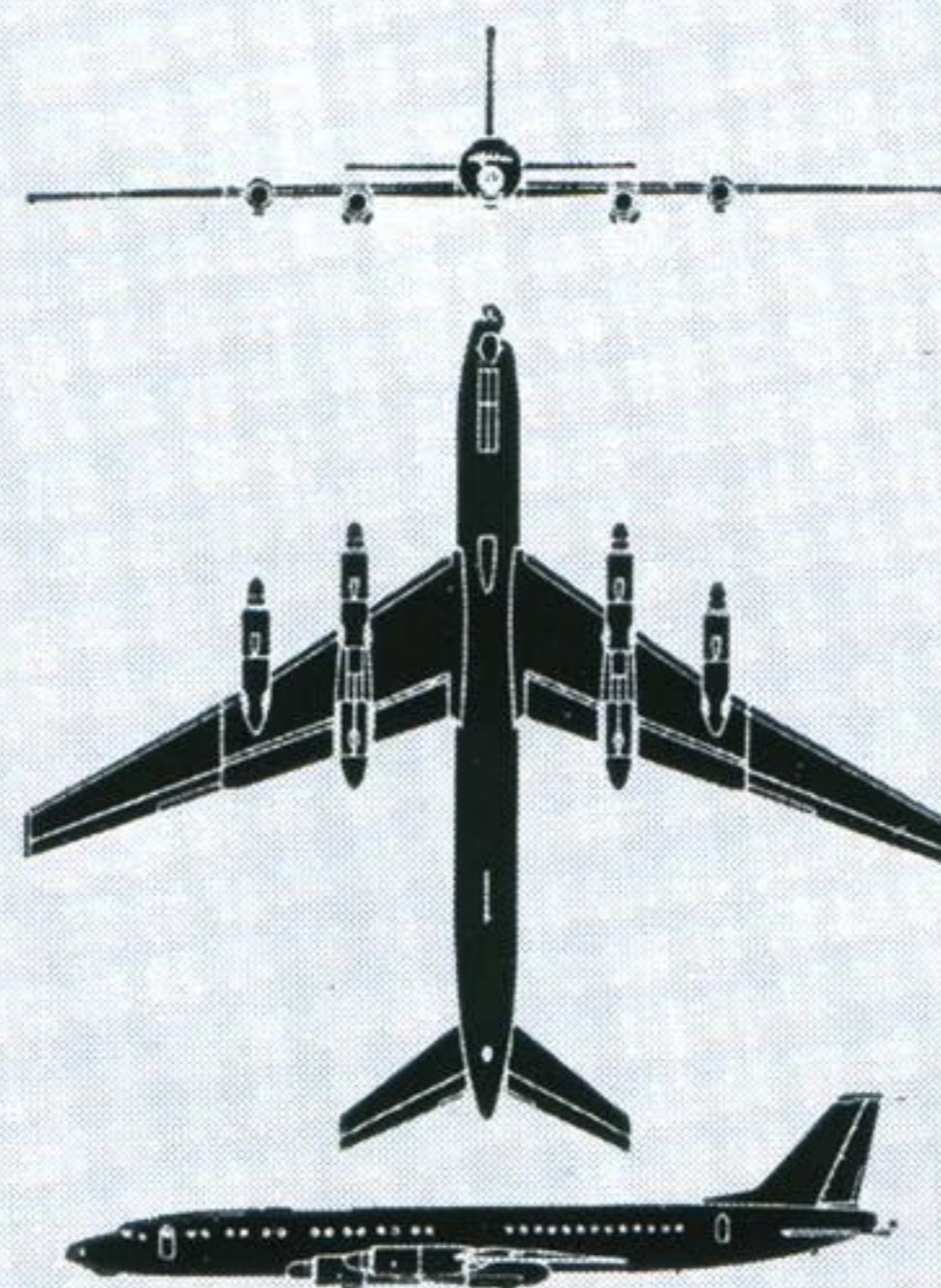
CAT This Russian transport is produced in versions with variations in fuselage length and fitting of small twin fins outboard on the tailplane. **Span 125 feet**



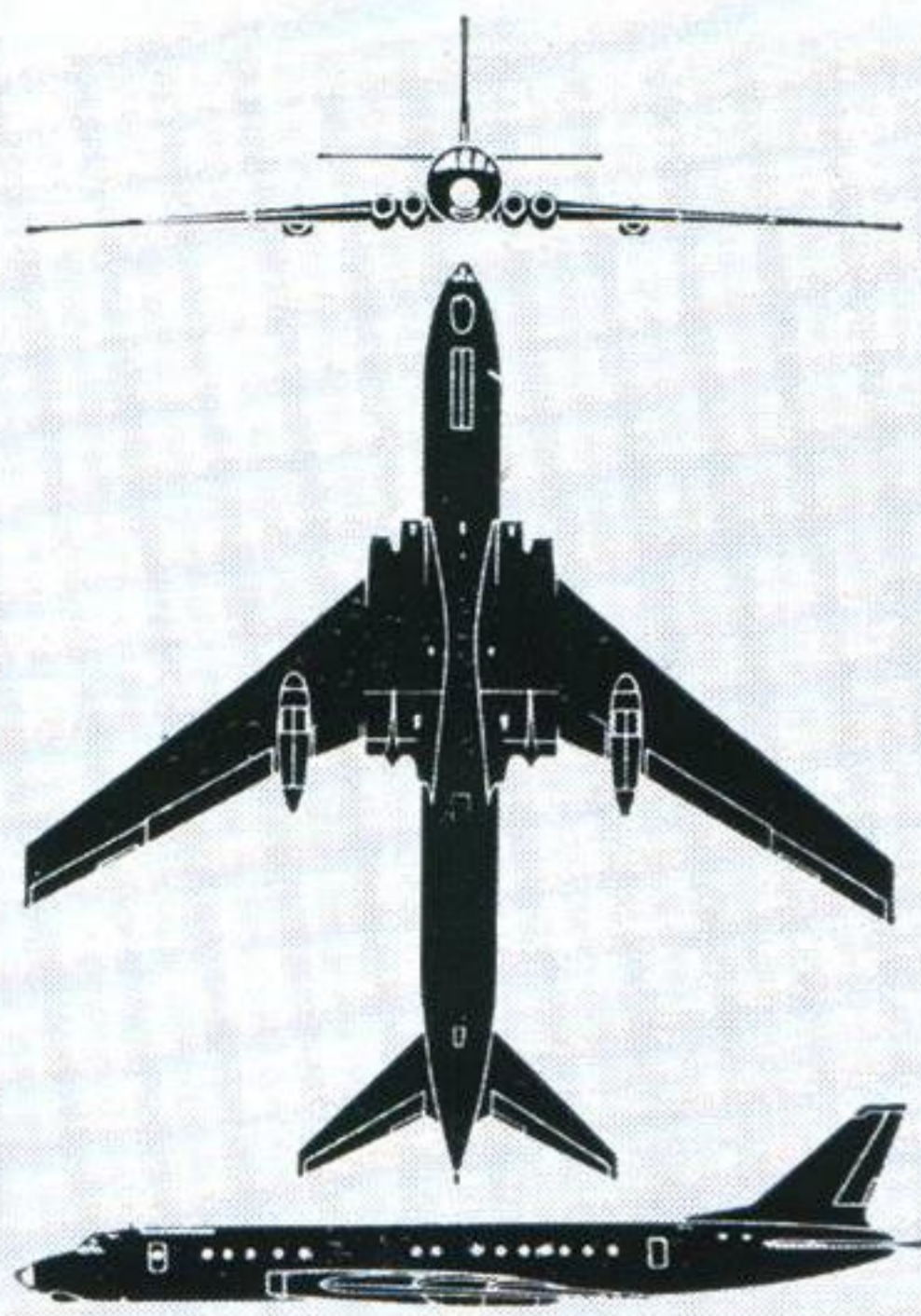
SUPERFORTRESS (B-29) Only the TB-29A version of this wartime production order veteran remains, but it is possible that some of the Russian-built models, named Bull, are still serviceable. **Span 141 feet**



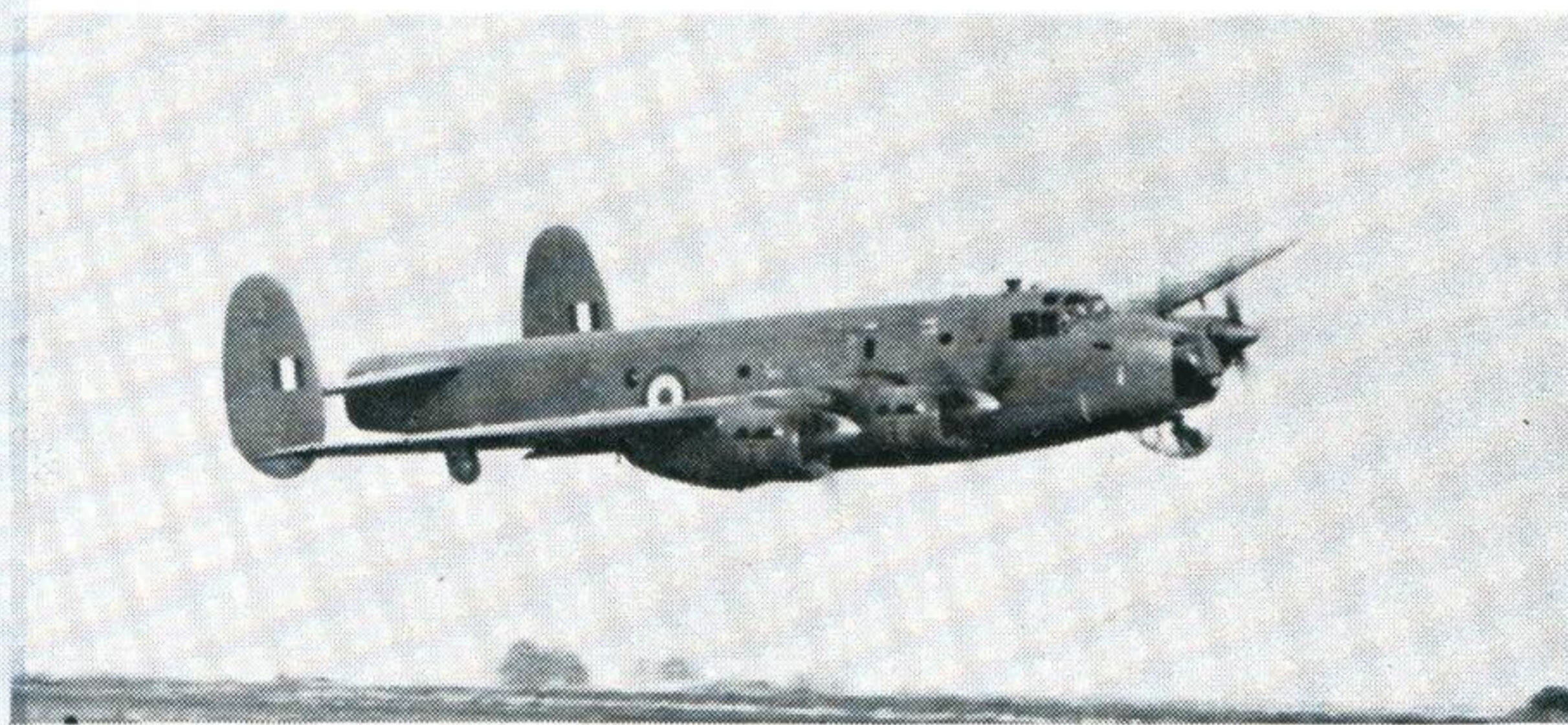
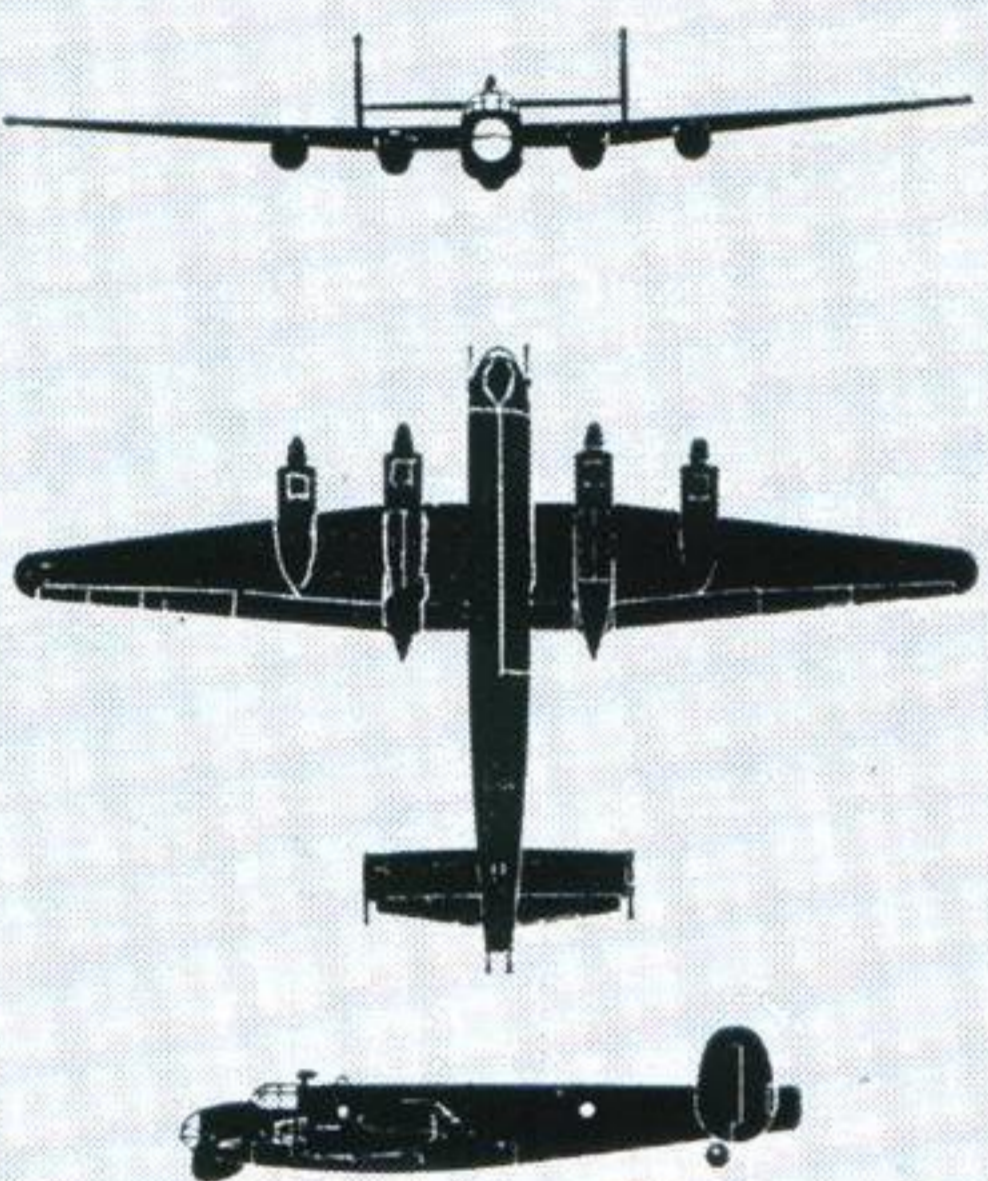
STRATOFREIGHTER Developed as a transport version of the Superfortress, the C-97 Stratofreighter has in later years been used as a tanker/transport and now serves only in reserve units. **Span 141 feet**



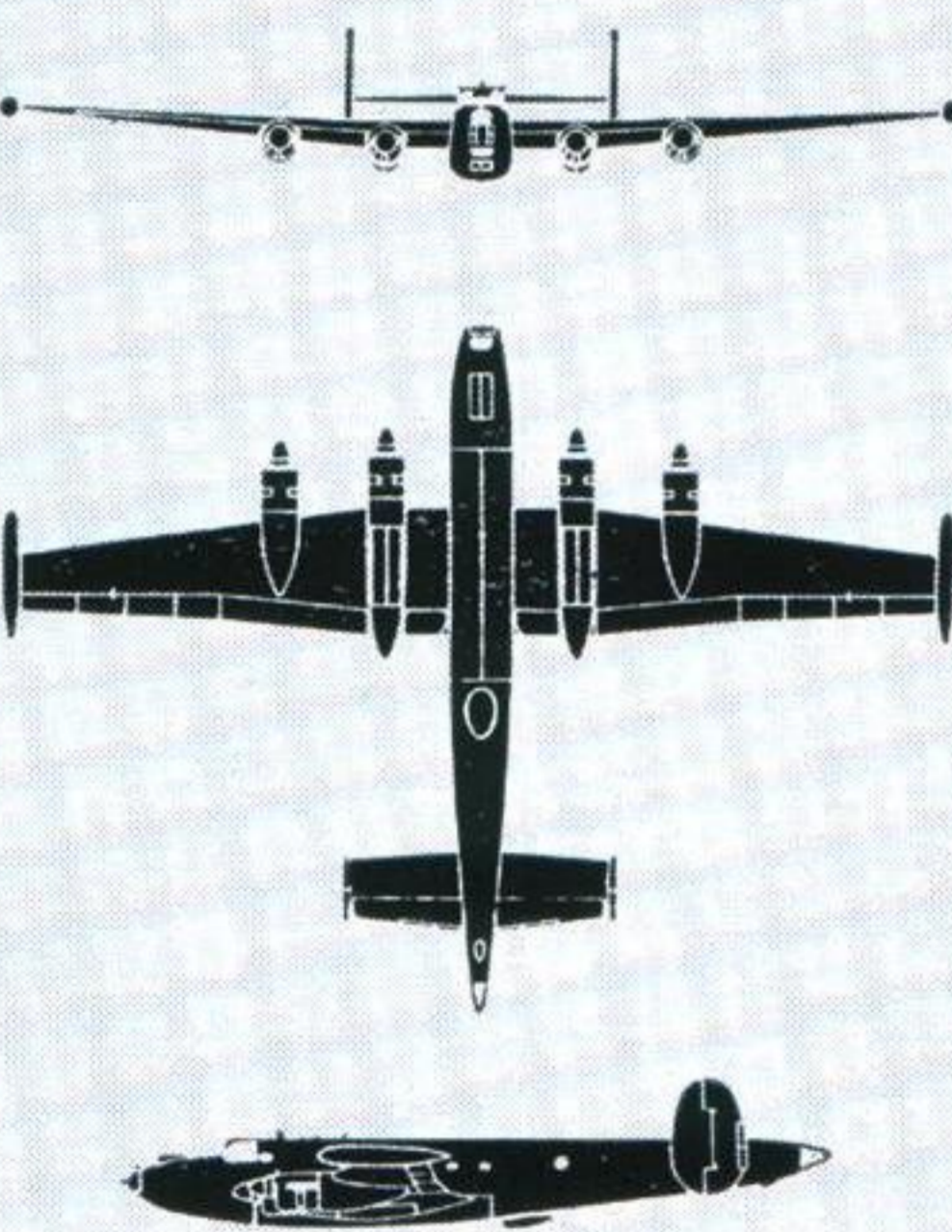
CLEAT Civil counterpart of the Bear, the Tu-114 is the world's largest airliner. **Span 167 feet**



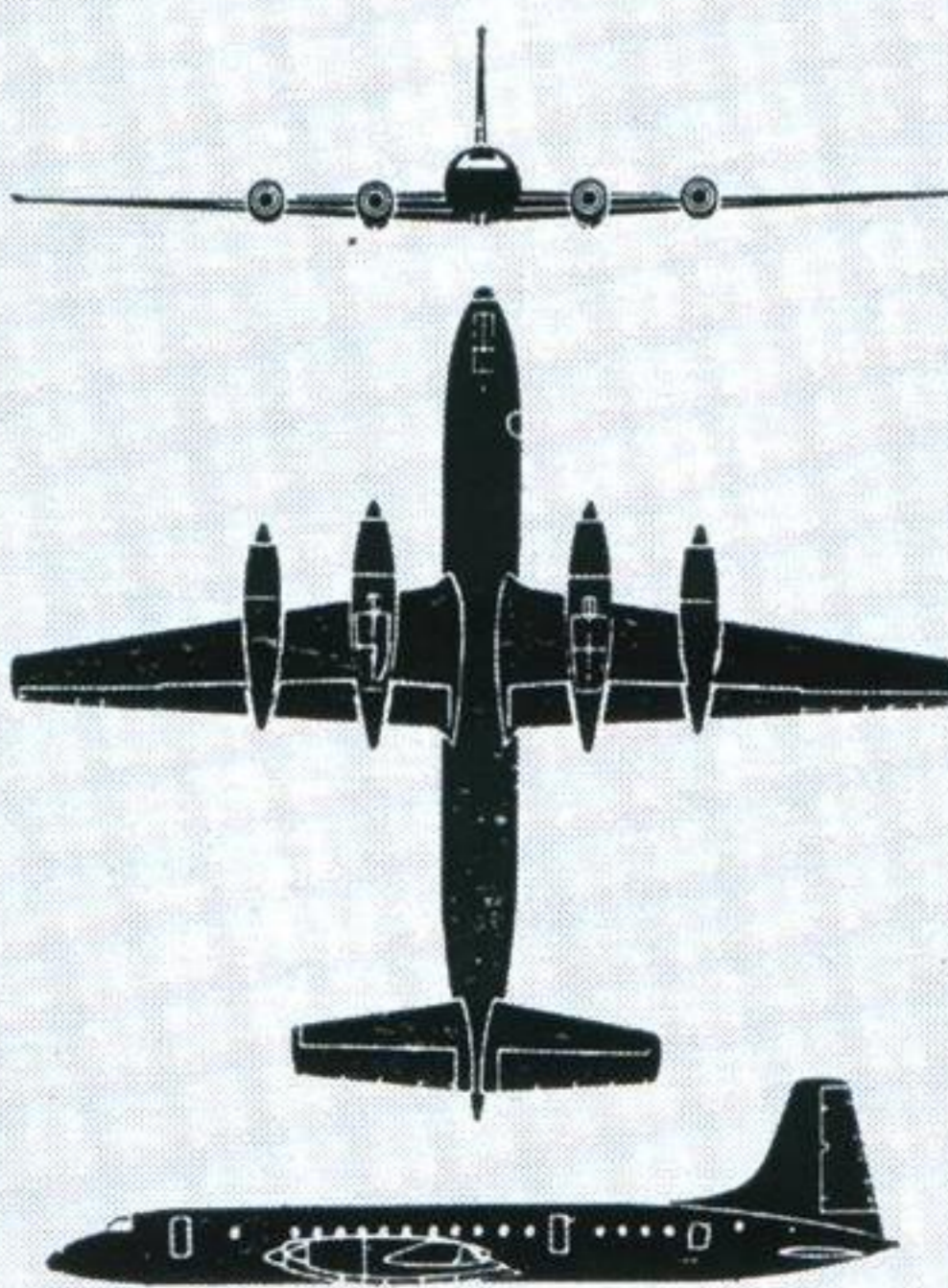
COOKER A four-jet version of the Camel with lengthened fuselage that did not go into large-scale production.
Span 123 feet



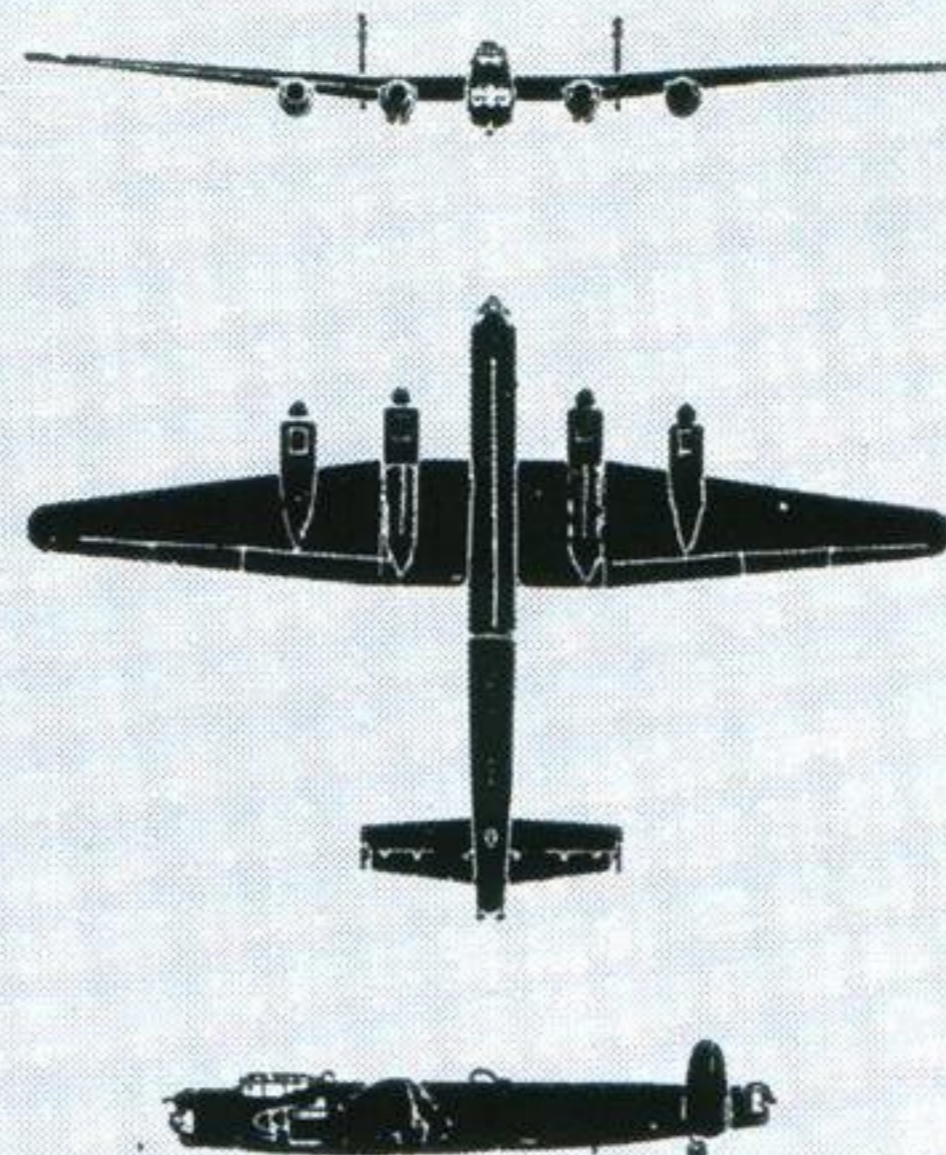
SHACKLETON T.4 Developed from the Lincoln the original service M.R.I. Shackletons have in turn been modified for training under the designation T.4.
Span 120 feet



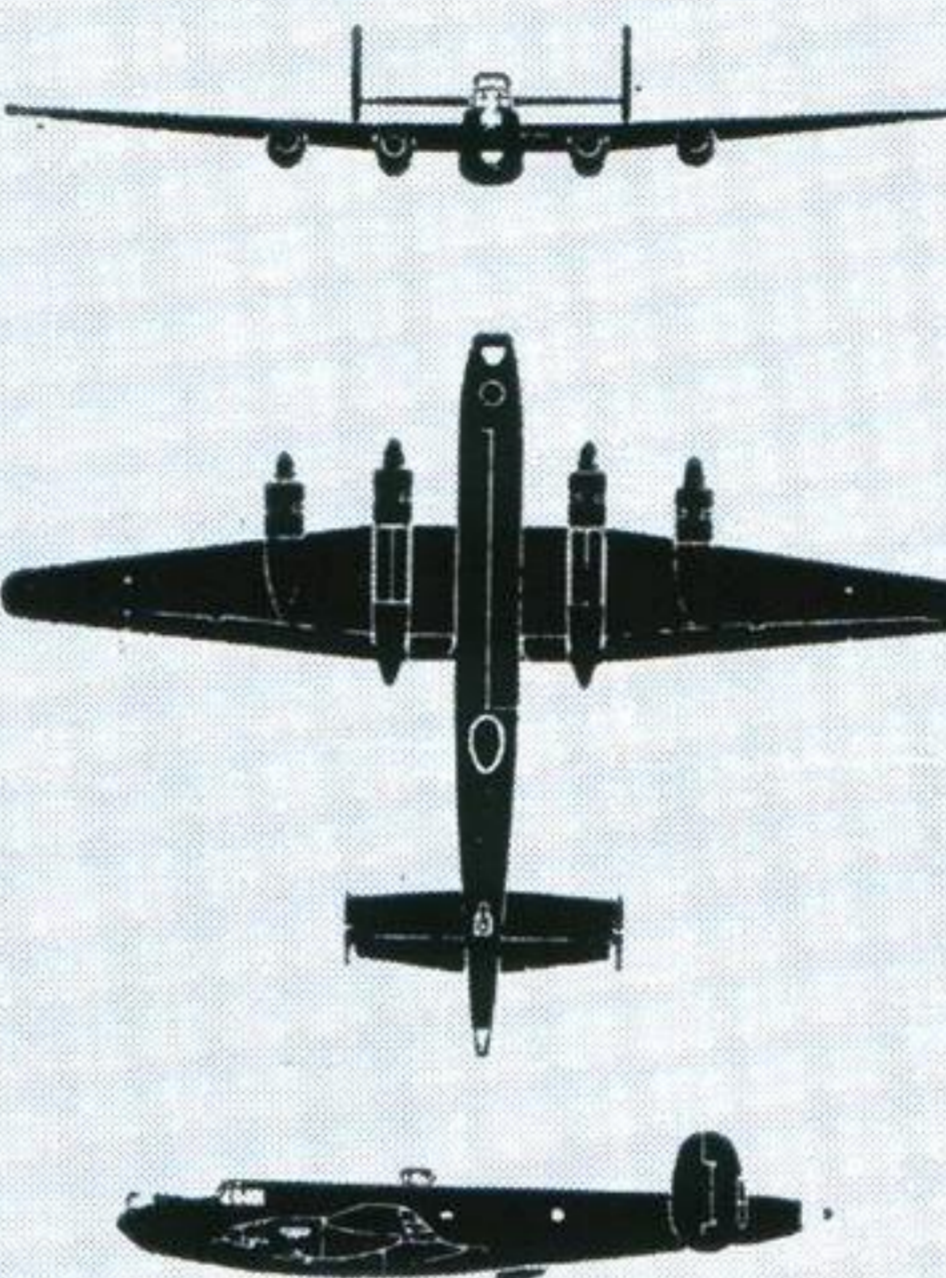
SHACKLETON M.R.3 Final production version of the Shackleton with tricycle undercarriage and wingtip fuel tanks; in R.A.F. and S.A.A.F. service.
Span 120 feet



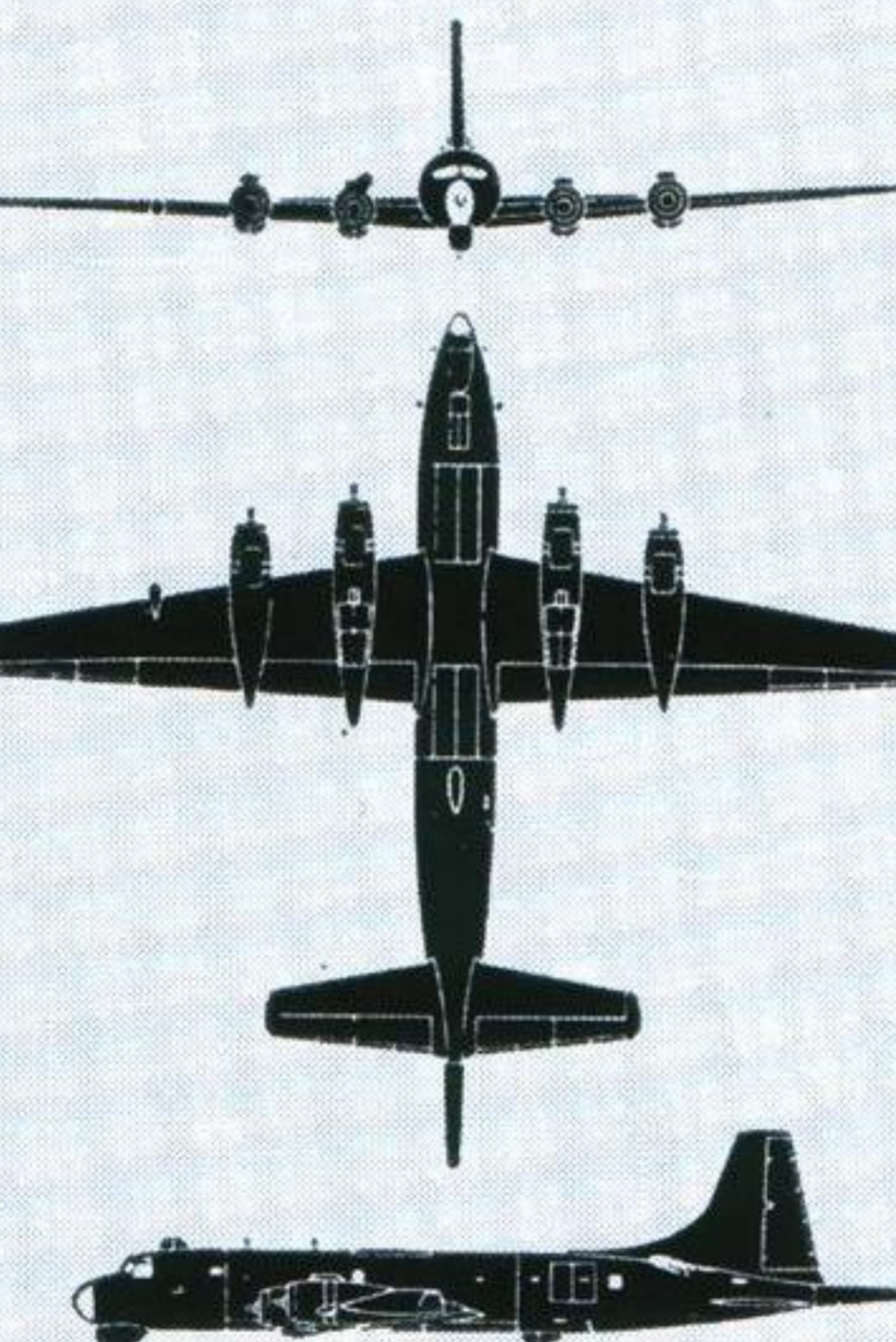
BRITANNIA Produced in different series versions, with main differences in fuselage length, the Britannia is widely used by airlines world-wide and twenty are in R.A.F. use.
Span 142 feet



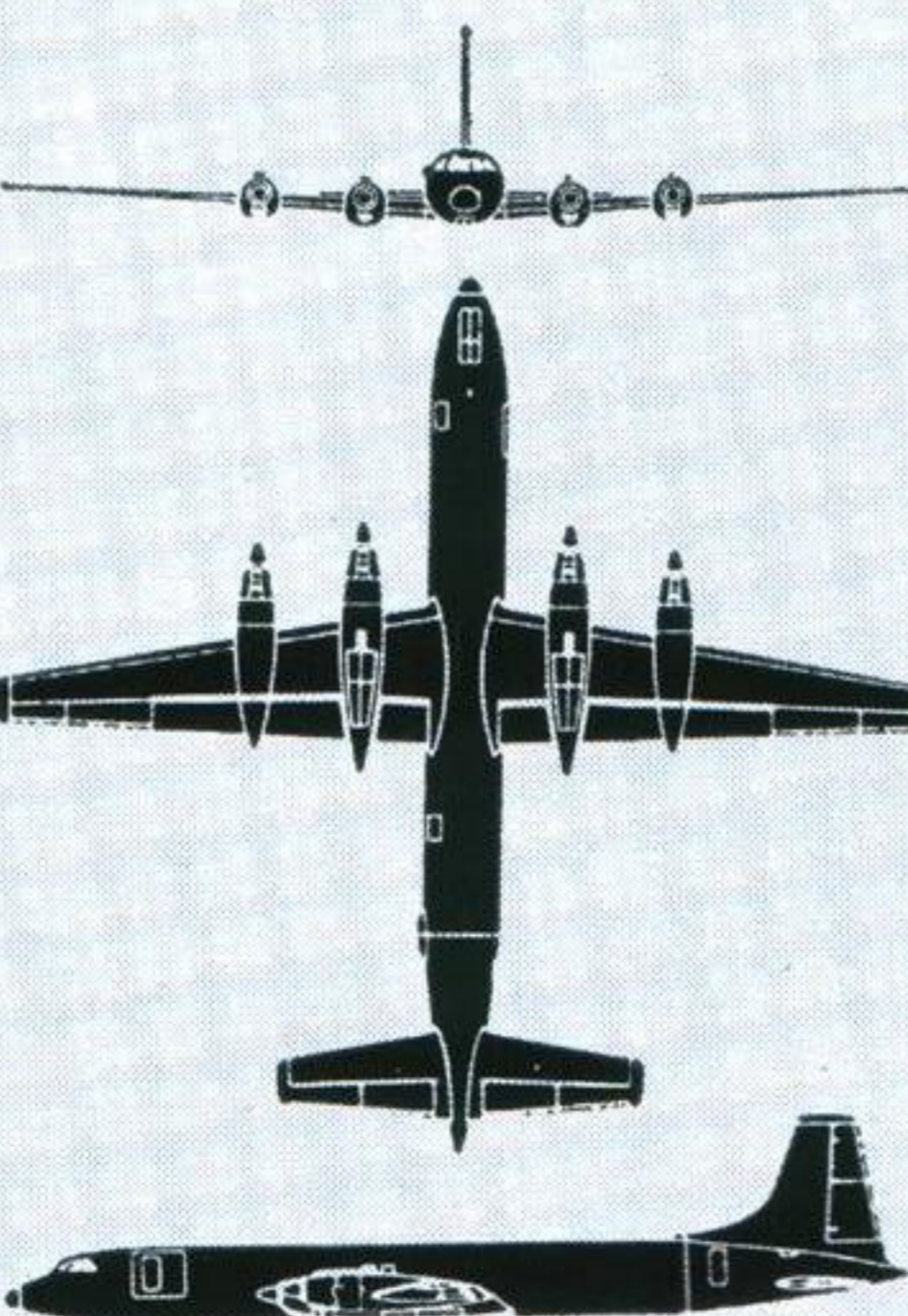
LINCOLN Starting life as the Lancaster IV, a few Lincolns survive in the Argentine and one is still serviceable in the U.K.
Span 120 feet



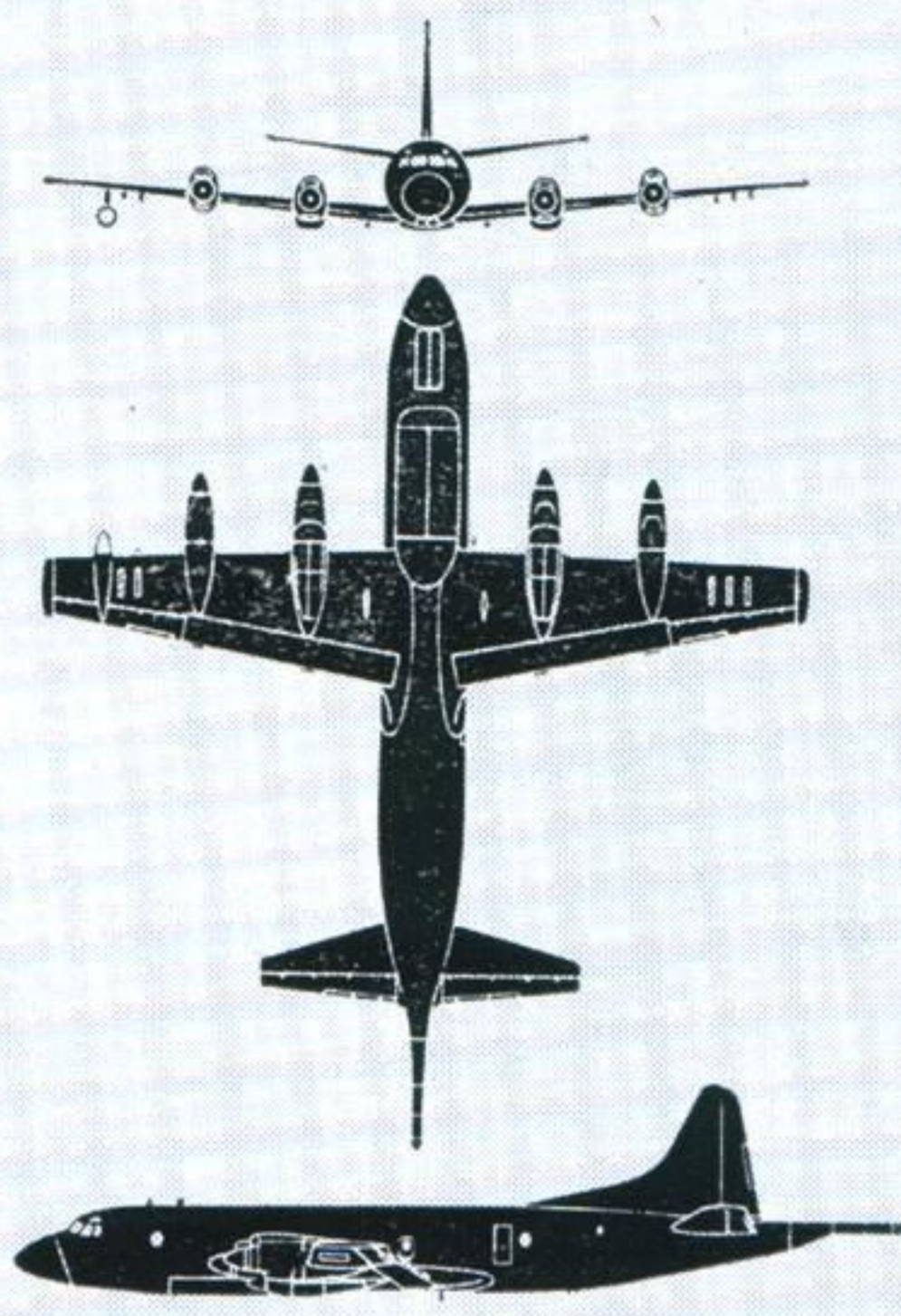
SHACKLETON M.R.2 Developed version of M.R.1 with streamlined nose and faired transparent tail cone, and with nose radome equipment of M.R.1 housed in retractable ventral radome.
Span 120 feet



ARGUS The R.C.A.F.'s counterpart of the maritime reconnaissance Shackleton was based on the Bristol Britannia. Size of chin radome varies accordingly to Mk. 1 or 2 versions.
Span 142 feet



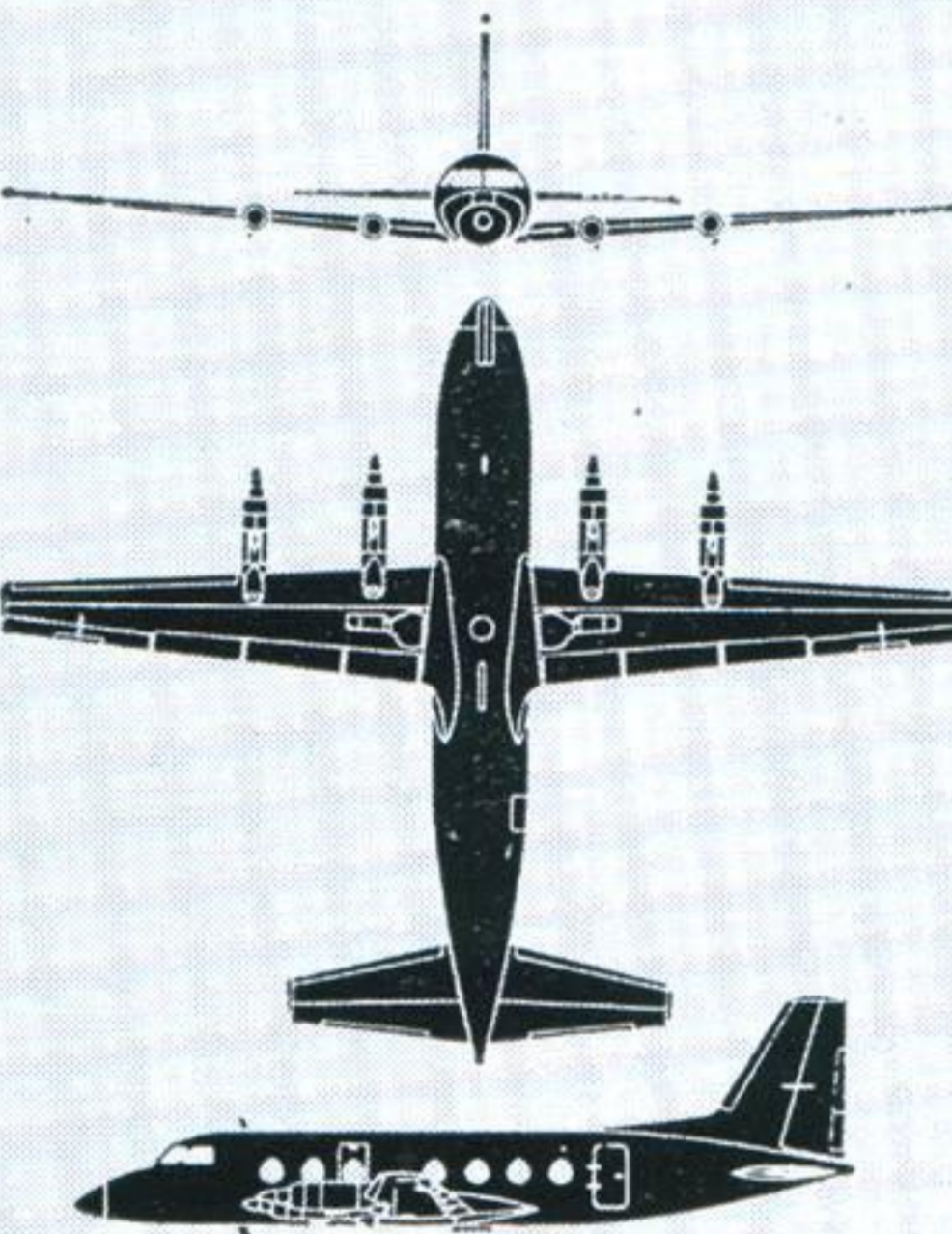
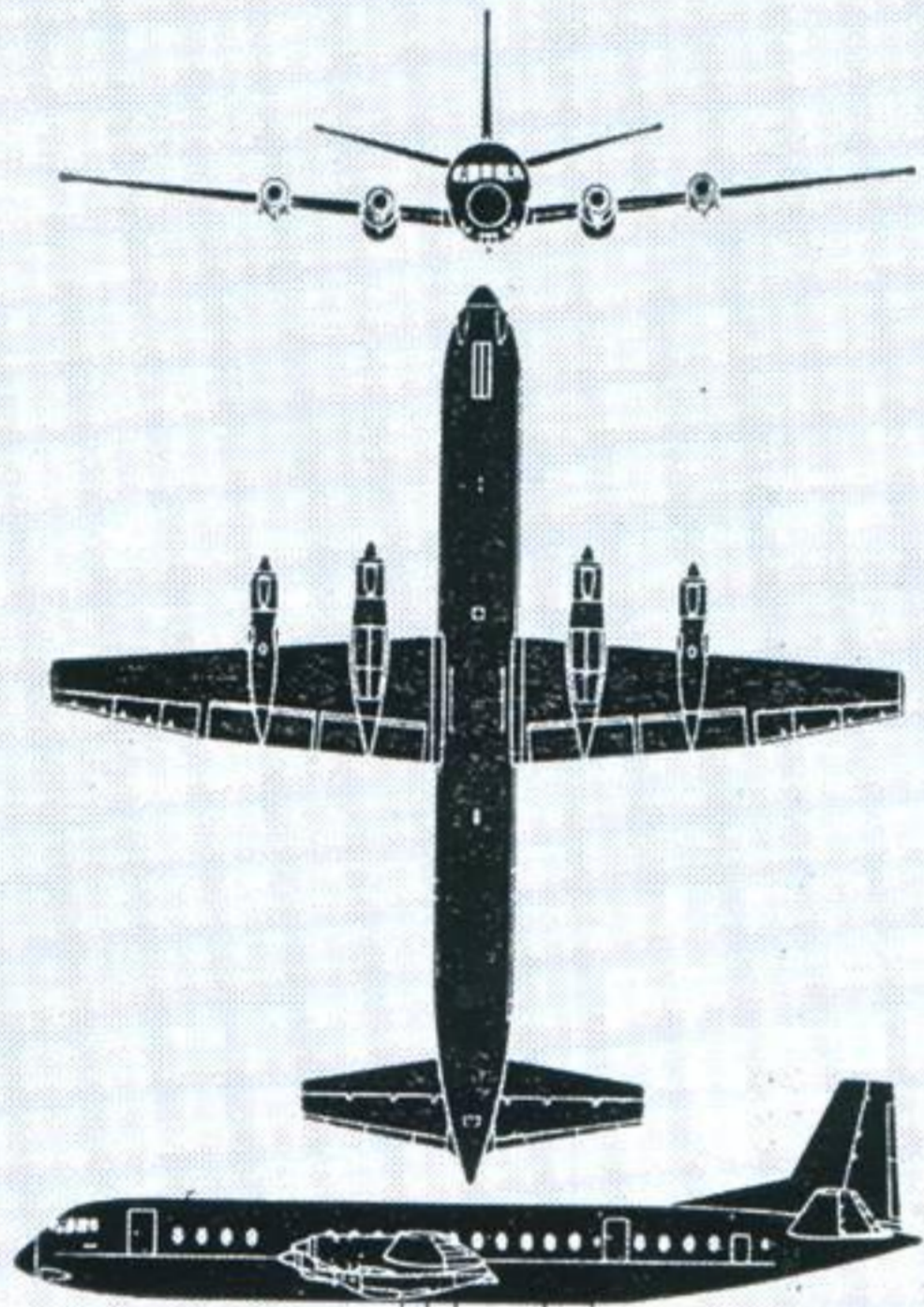
YUKON A "stretched fuselage" version of the Britannia used by the R.C.A.F. and built by Canadair. A civil version, the Canadair CL-44D, has a hinged rear fuselage to facilitate loading.
Span 142 feet



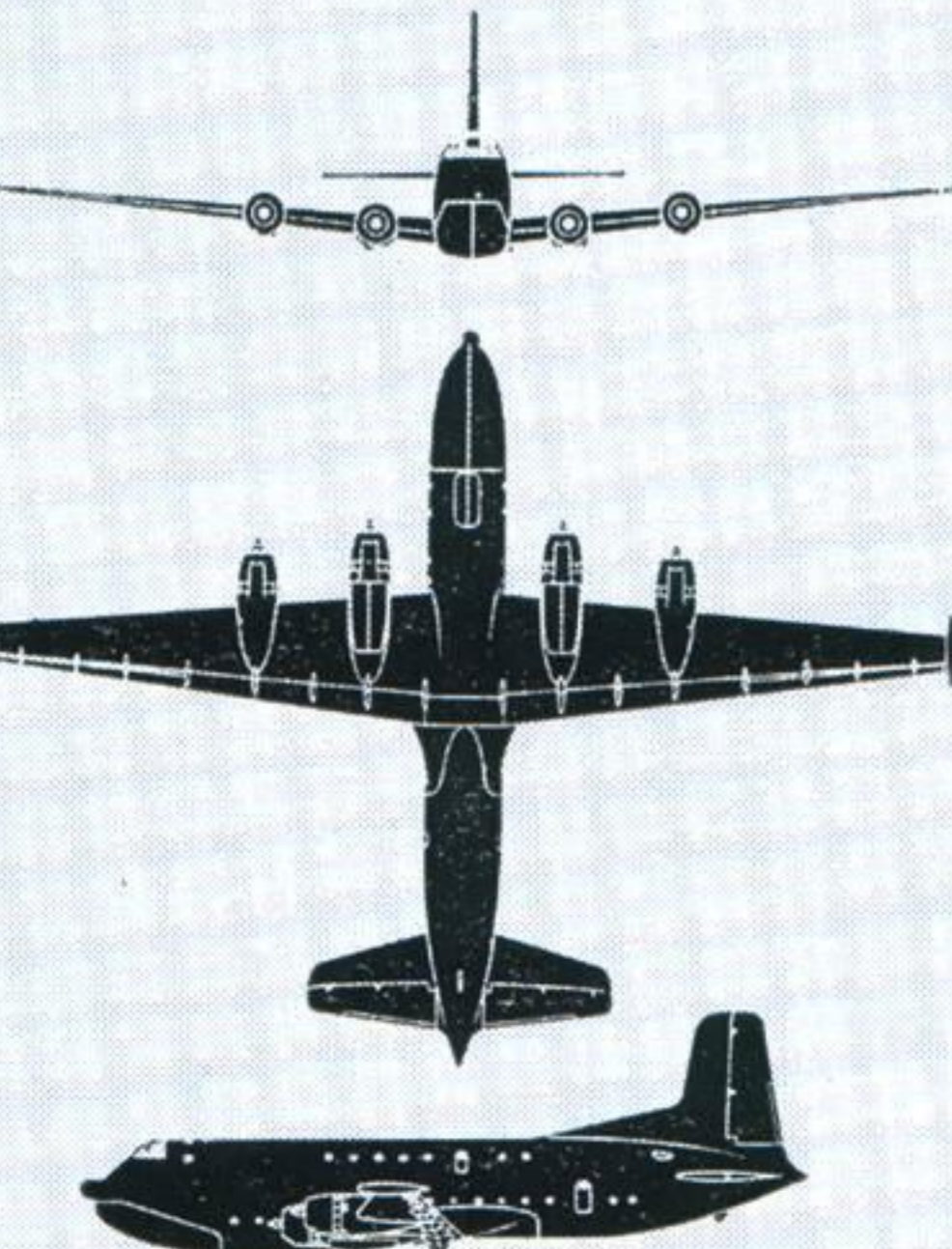
ORION The U.S. Navy's version of the civil Lockheed Electra adapted for maritime reconnaissance. A new camouflage scheme in sea grey is being introduced for these aircraft. Span 100 feet



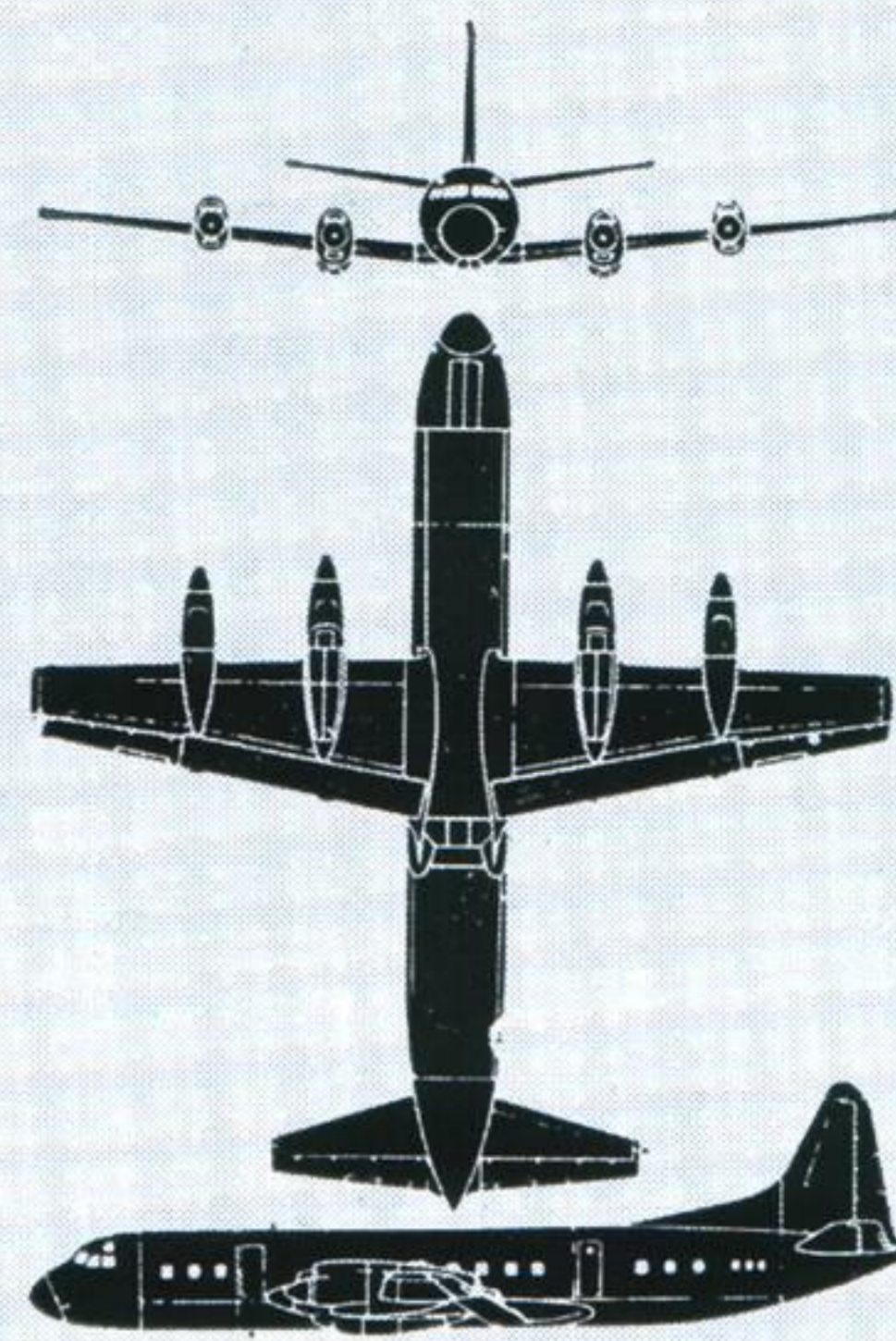
VANGUARD Over forty Vanguards are in use in two airlines, B.E.A. and T.C.A. Span 118 feet



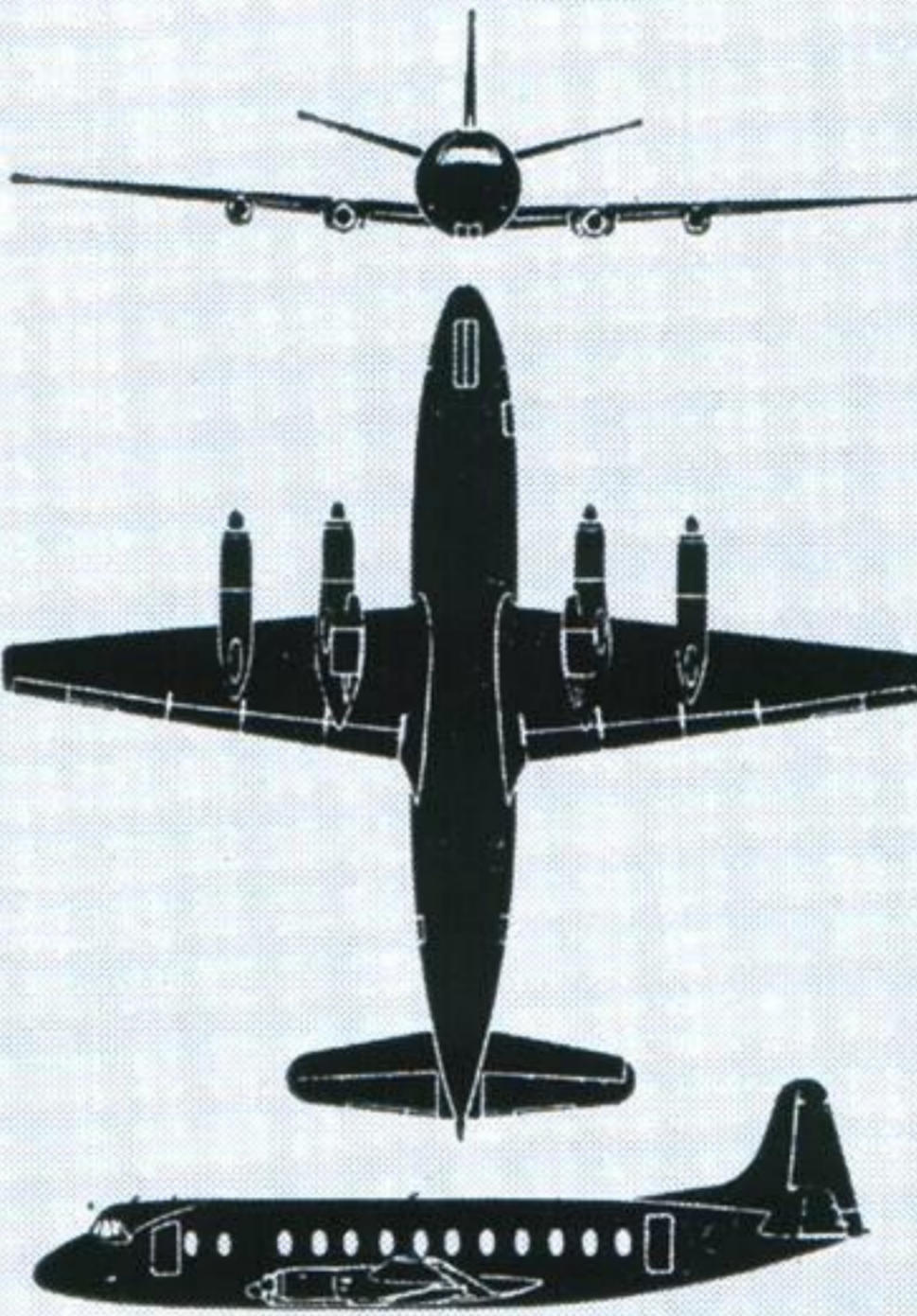
POTEZ 842 From the prototype Potez 840, a production series designated Potez 842 is being prepared in two versions with variations in fuselage length. Span 64 feet



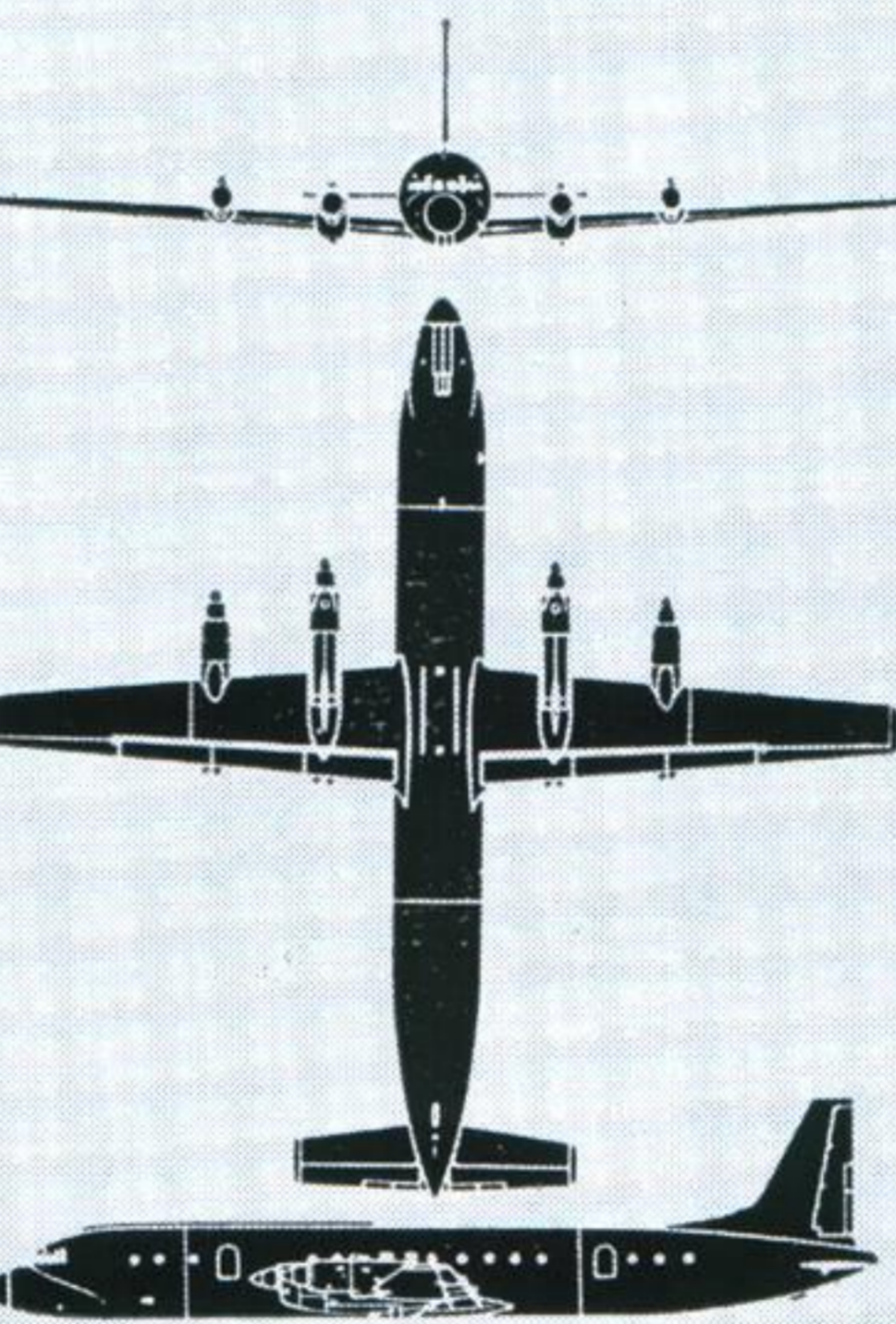
GLOBEMASTER II A U.S.A.F. transport the Globemaster II went into service in two versions, C-124A and C-124C, but the bulk are now to the C-124C standard depicted. Span 174 feet



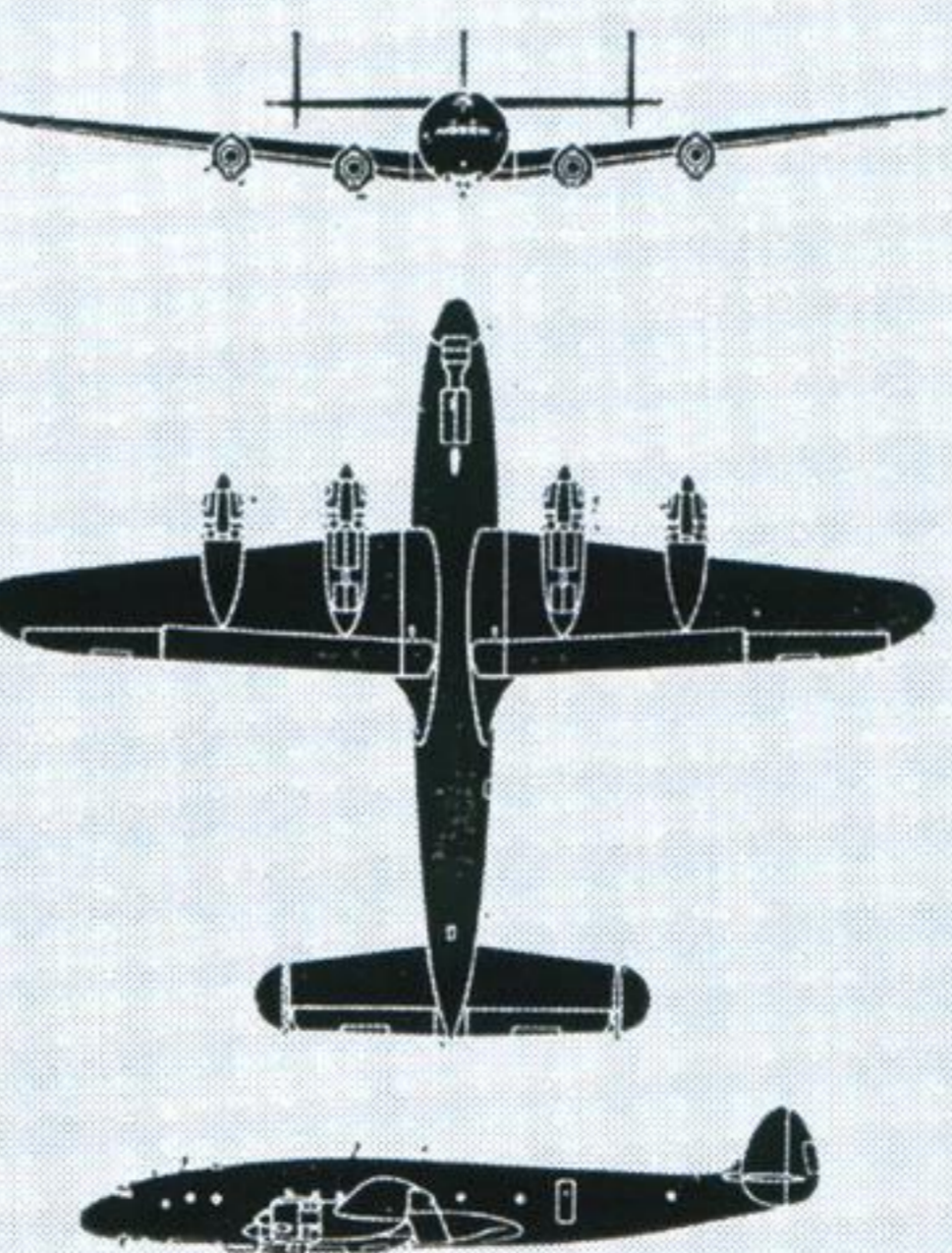
ELECTRA Over 150 of these Lockheed turbojet short-to-medium range airliners are currently in service. Span 99 feet



VISCOUNT Produced in large numbers for airlines world-wide, in several versions with variations in fuselage length, the Viscount is still in service in its hundreds. Span 94 feet

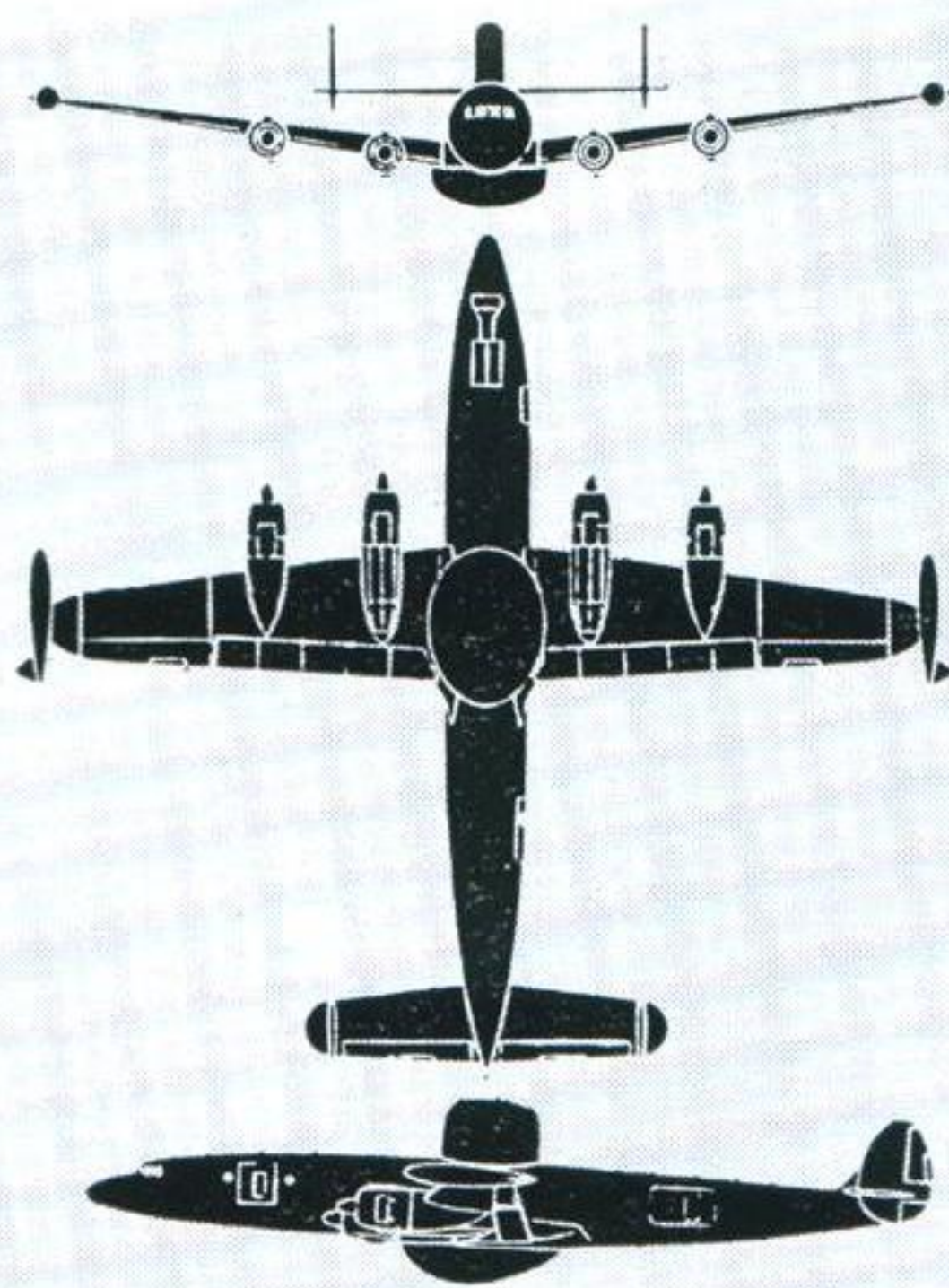


COOT This successful Ilyushin Il-18 airliner, known as the Moskva, is widely used by Aeroflot and is also in use by several airlines in Eastern Europe and in Africa. Span 113 feet

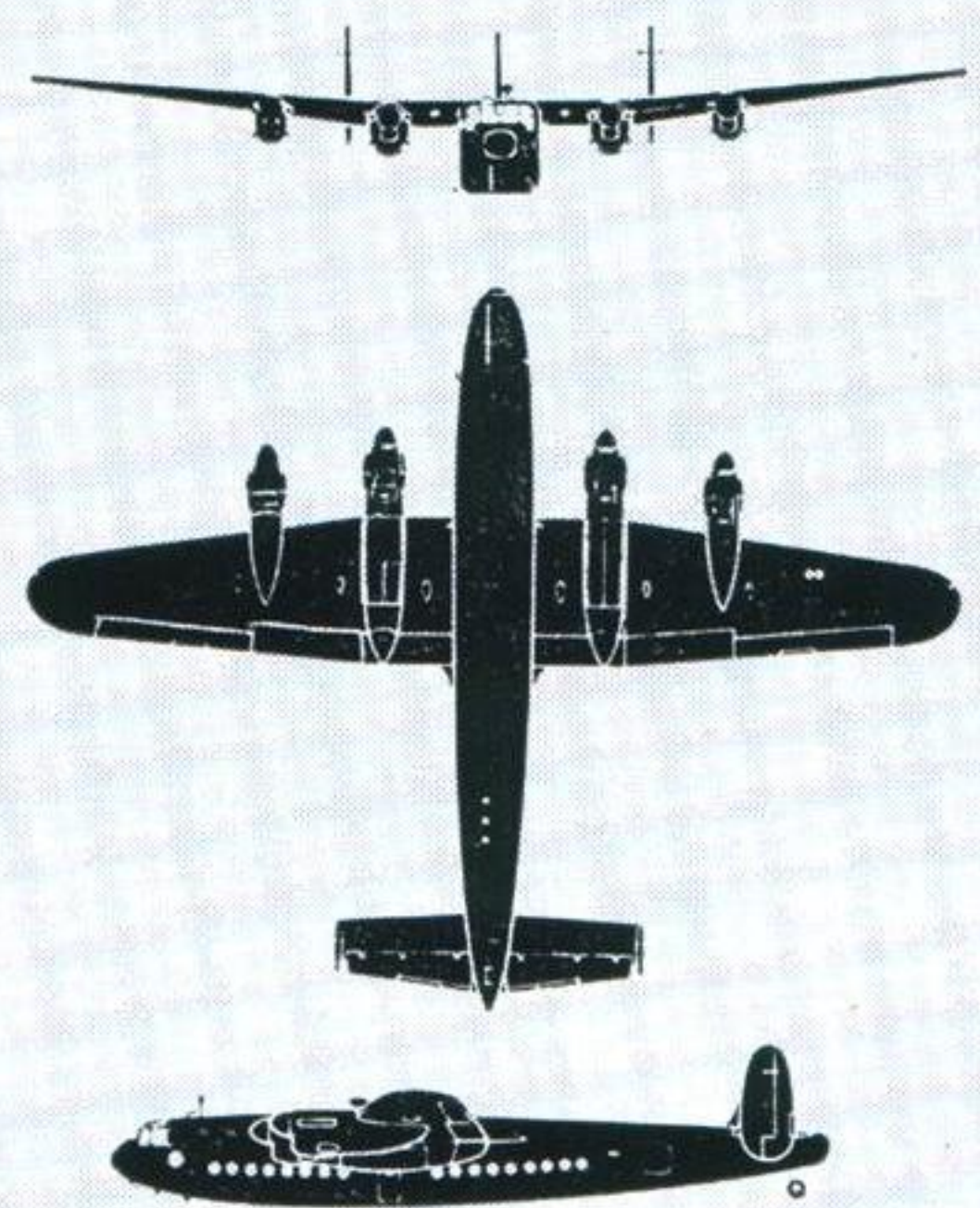


CONSTELLATION A number of the original Constellations, as apart from the longer Super Constellations, are still in use as civil airliners or freighters. Span 123 feet

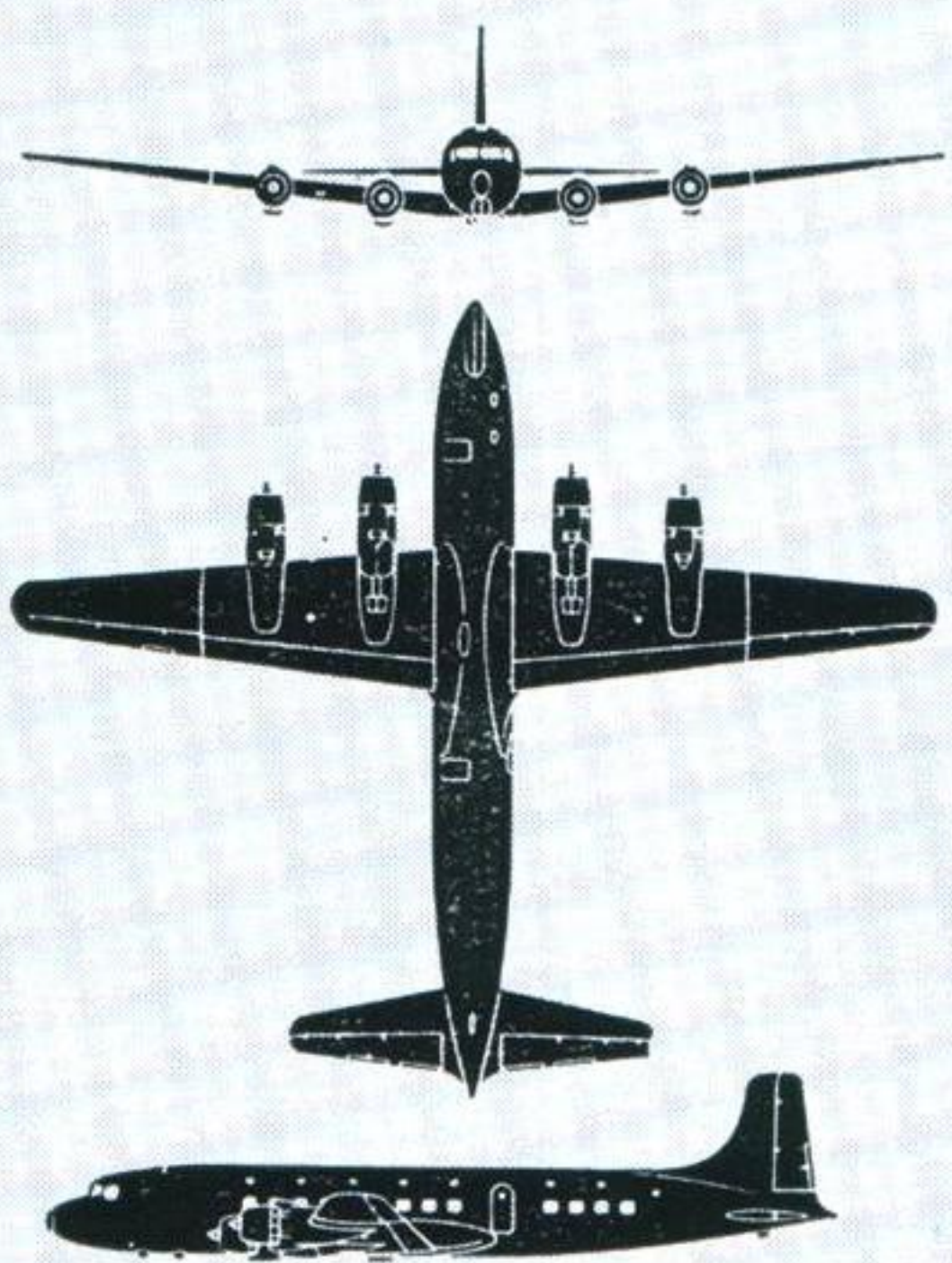




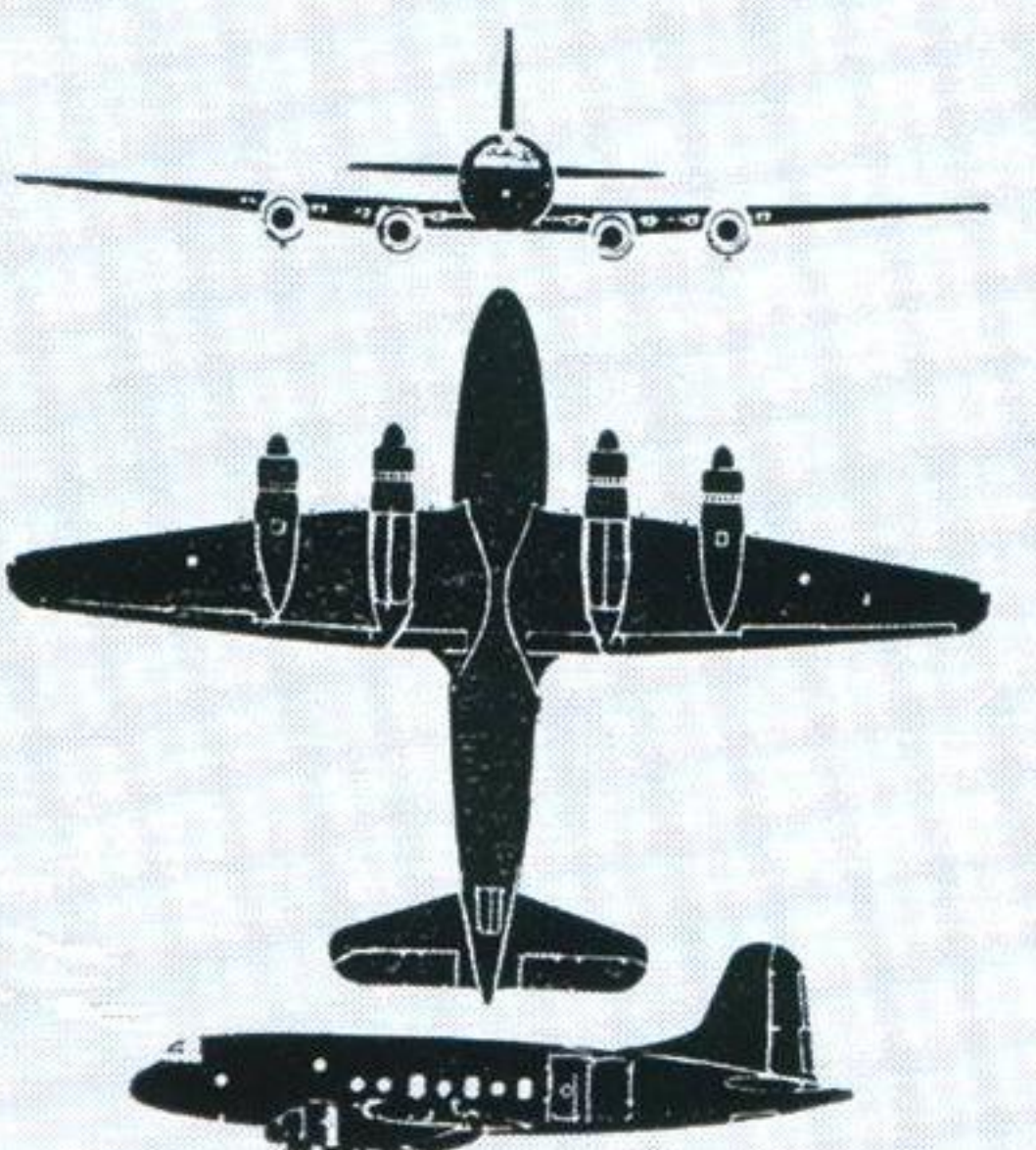
SUPER CONSTELLATION Used by the U.S. Forces as the C-121 Warning Star, the Super Constellation has been adapted for airborne early warning and weather reconnaissance roles. Span 123 feet



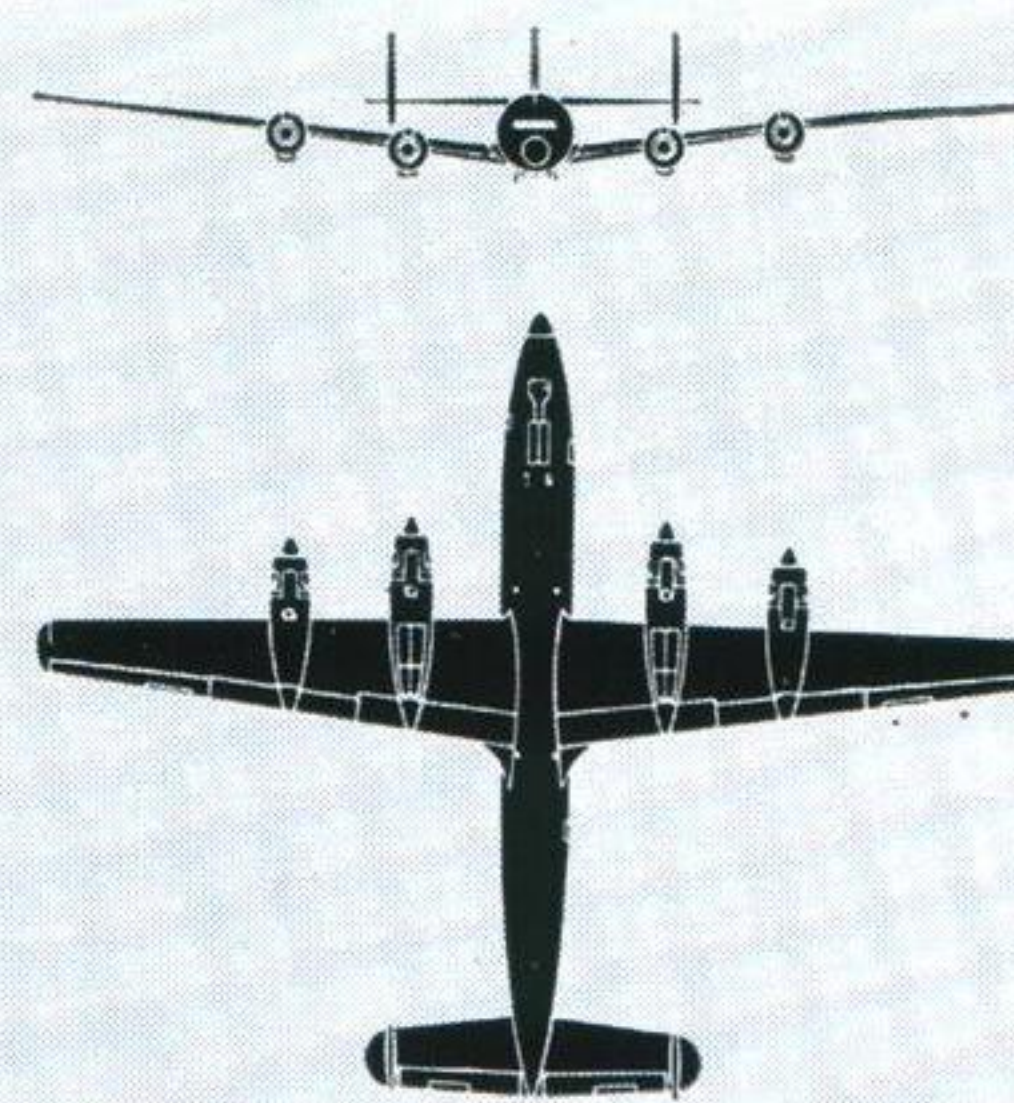
YORK This wartime transport, utilising a standard Lancaster wing form and undercarriage, is still in limited use overseas. Span 102 feet



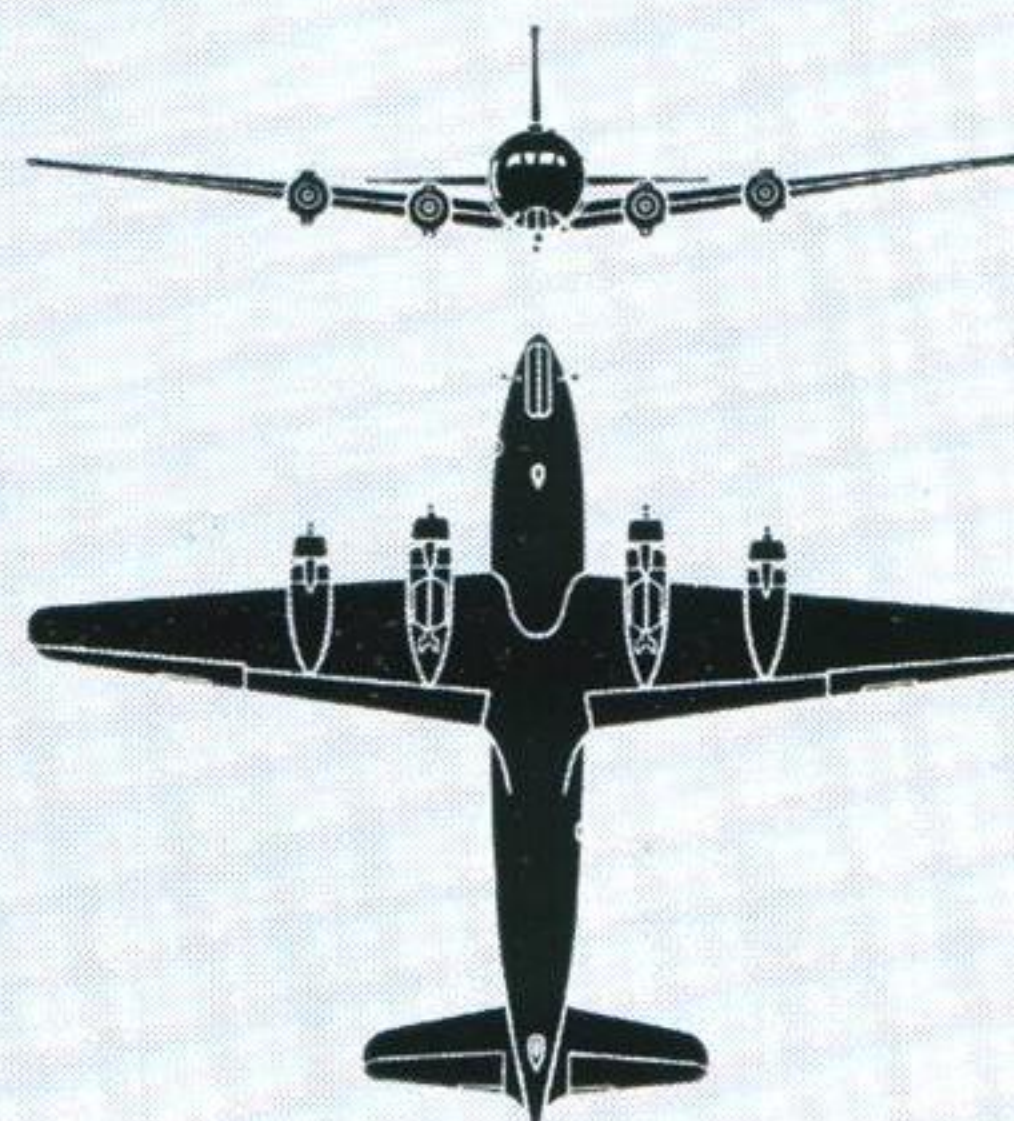
DC-6 A later version of the DC-4 with a fuselage stretch of 7 feet together with DC-6A freighter and DC-6B airliner with further length increases, are still widely used. Span 117 feet



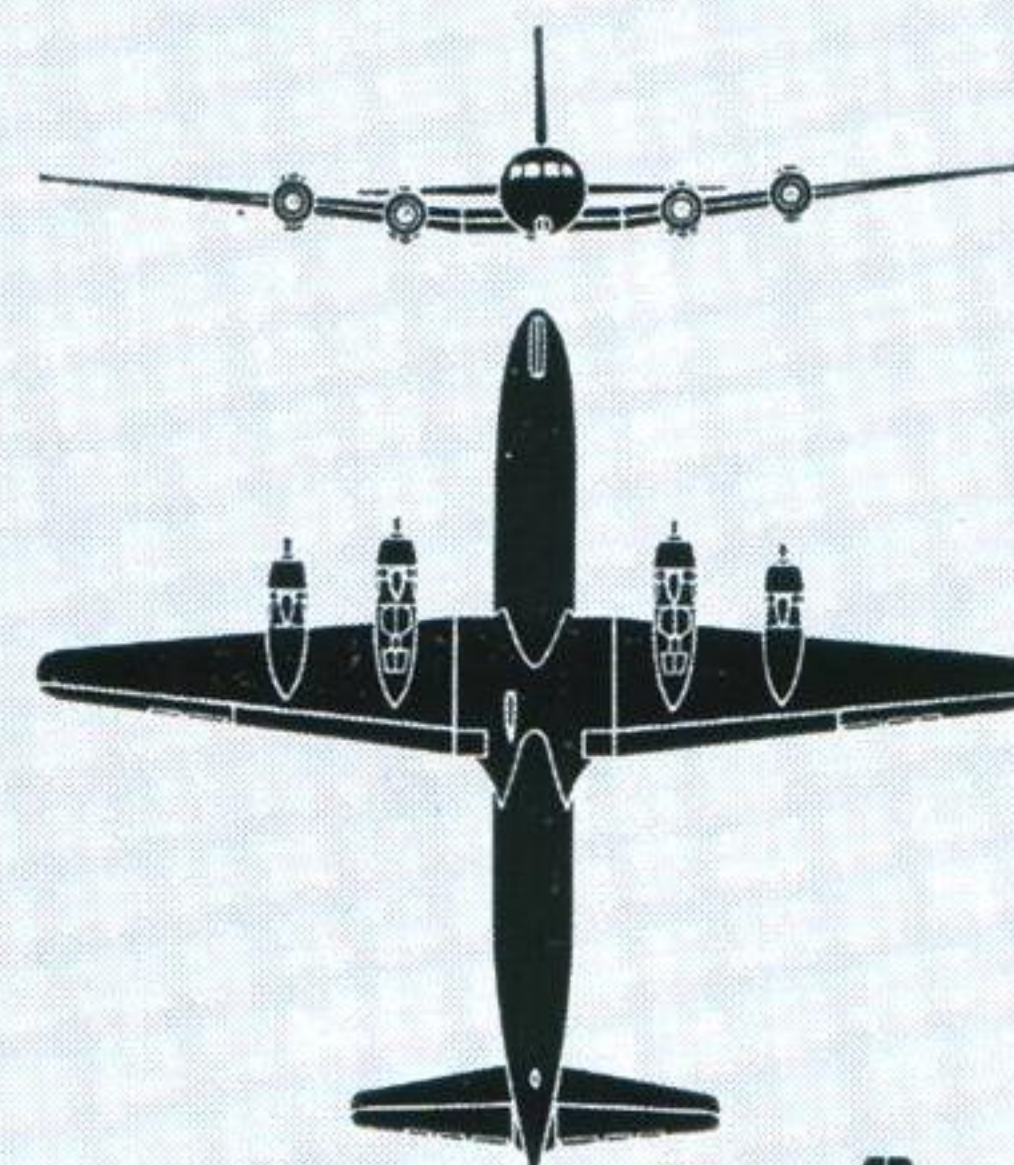
HASTINGS Backbone of R.A.F. Transport Command for many years, the Hastings is still in service. C.1 and C.2 versions vary in the height setting of the tailplane. Span 113 feet



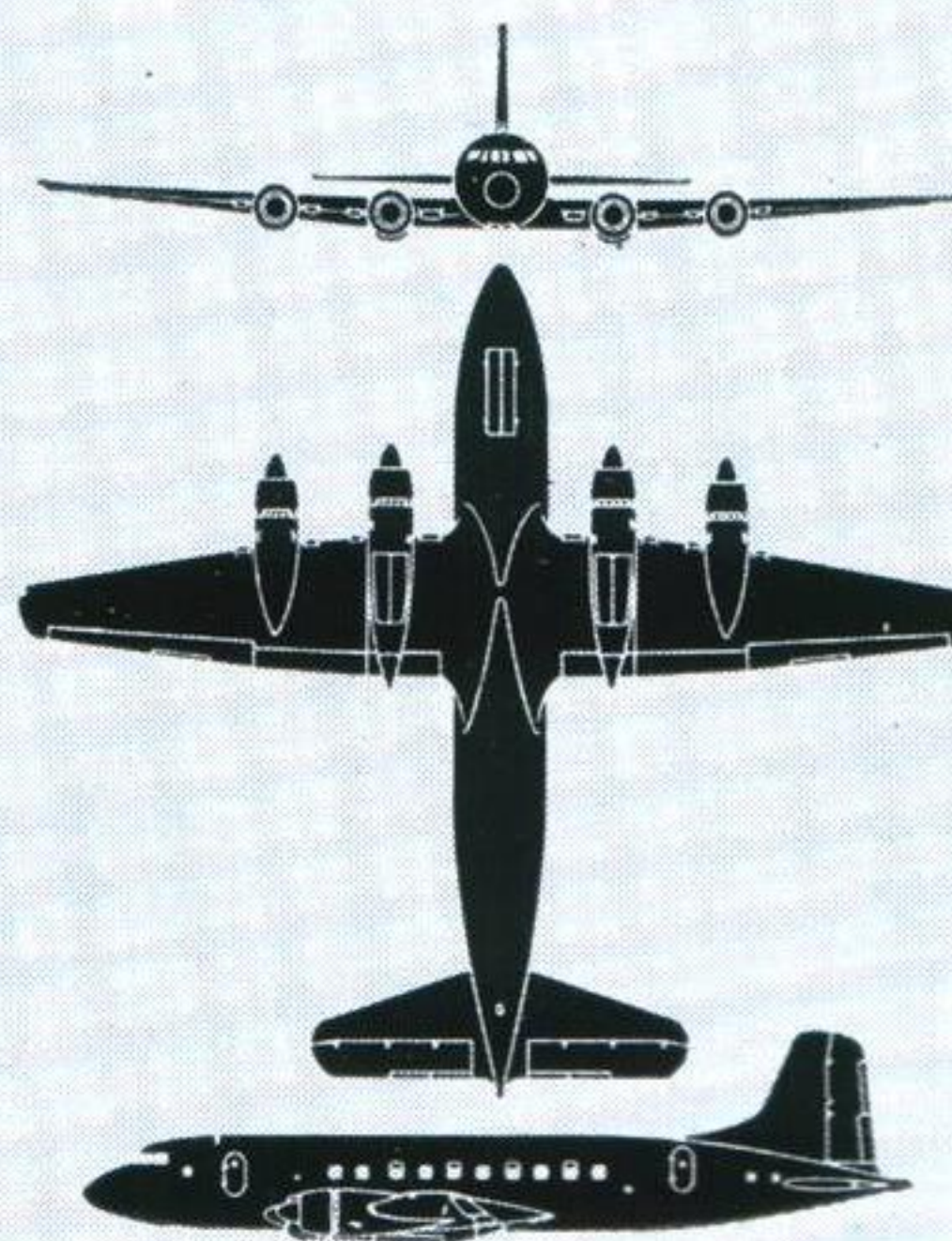
STARLINER Adapted from the Constellation, a limited number of Super Constellations were built with a wing of increased span and differing form. Span 150 feet



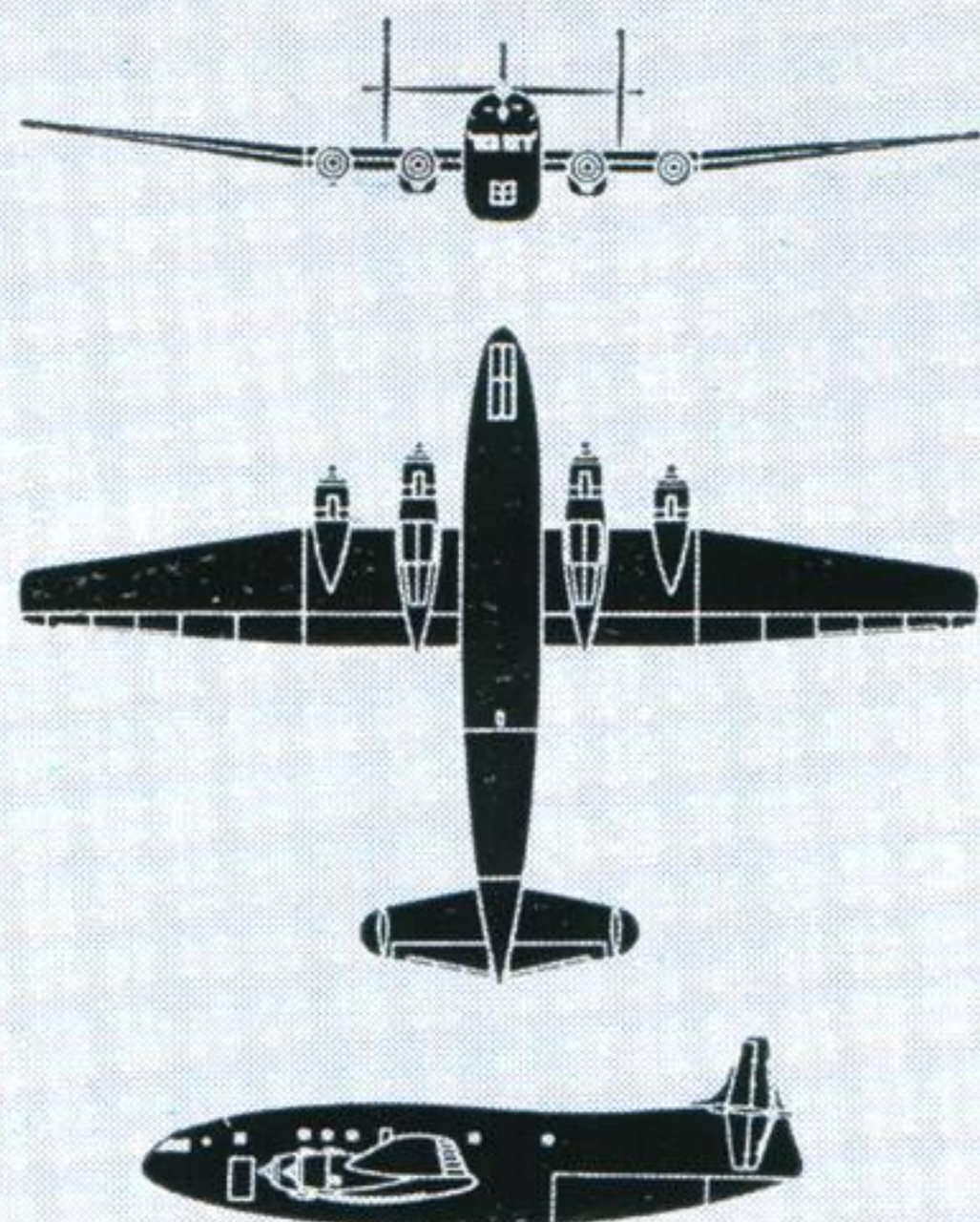
SKYMASTER The DC-4 design, C-54 Skymaster in U.S. service, was built in its thousands. A version built by Canadair for the R.C.A.F. (as per photo) was named North Star. Span 117 feet



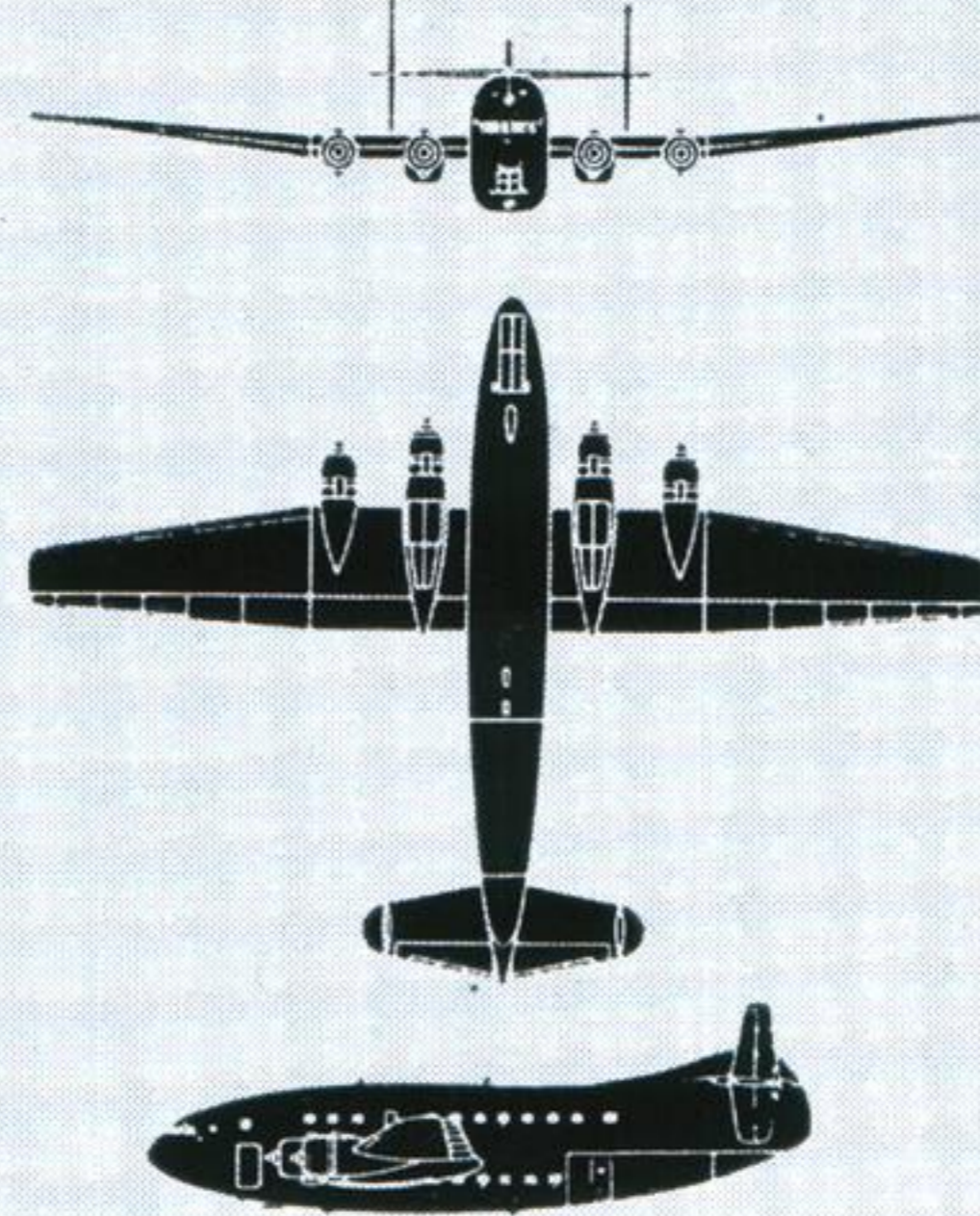
DC-7 A development of the DC-6, the DC-7 has increased span and fuselage length, together with a heightened fin. DC-7B and DC-7C versions have further increases to fuselage lengths and wing-spans. Span 117-127 feet (according to version)



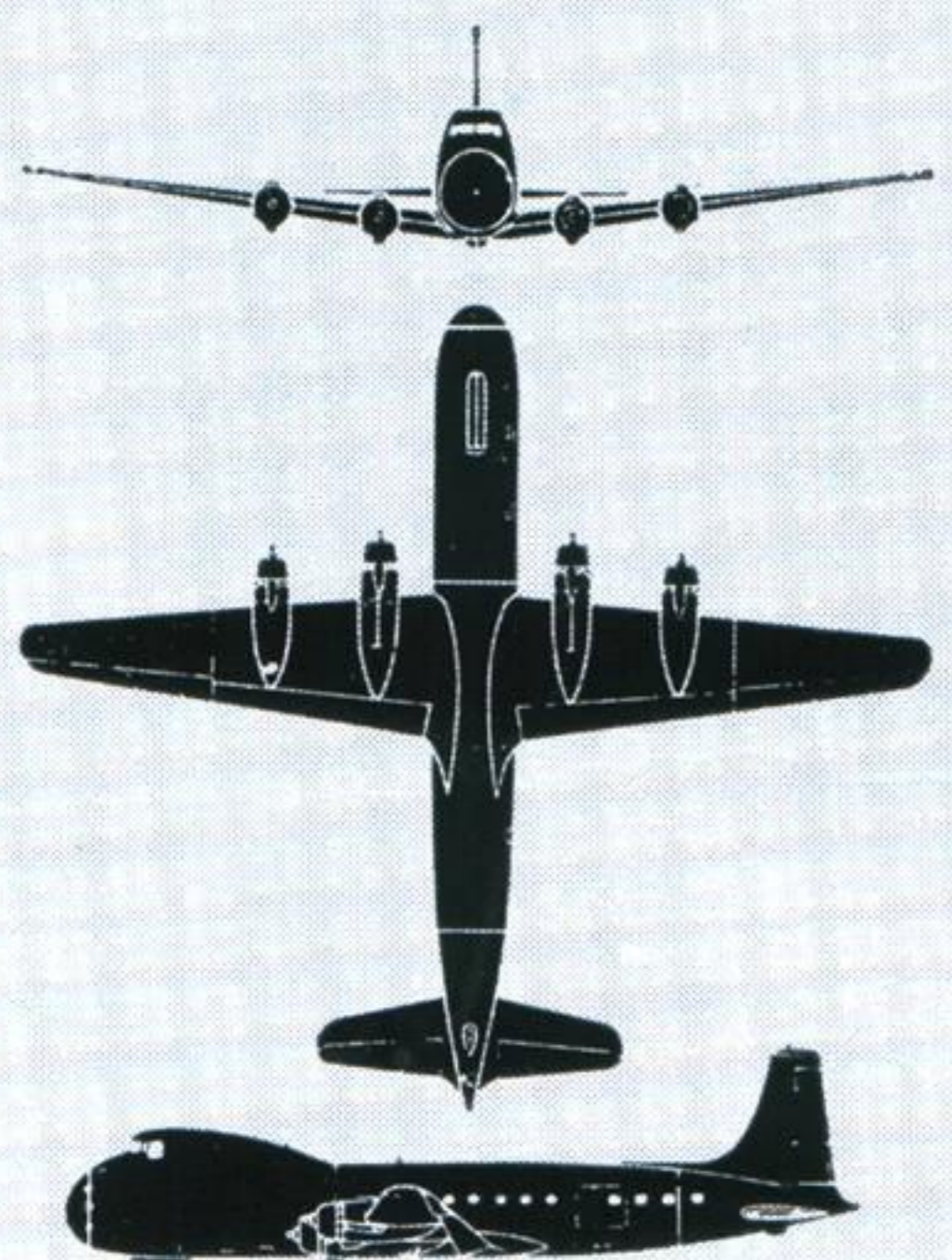
HERMES G-ALDA the sole remaining Hermes, civil version of the Hastings, was currently registered at the time of going to Press. Span 113 feet



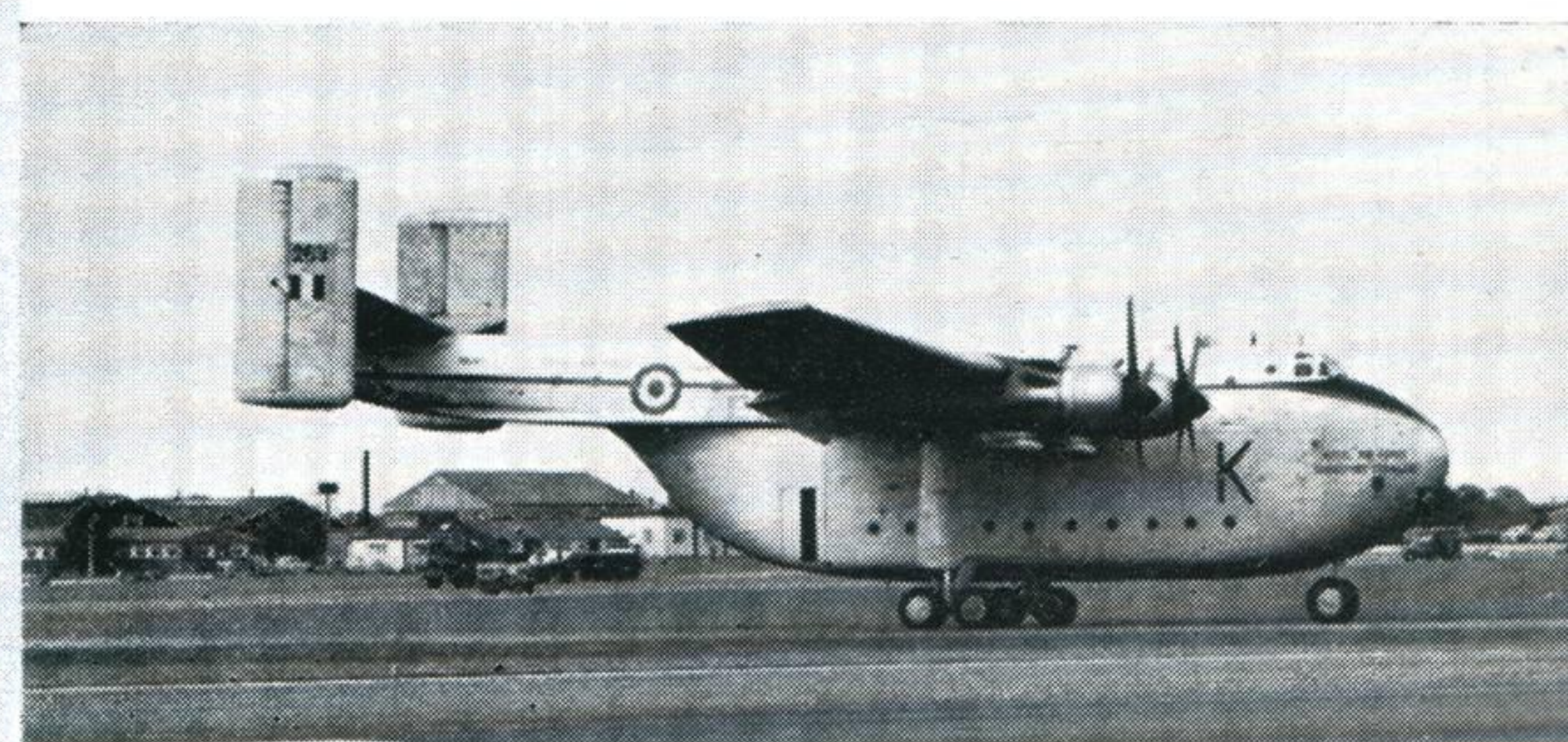
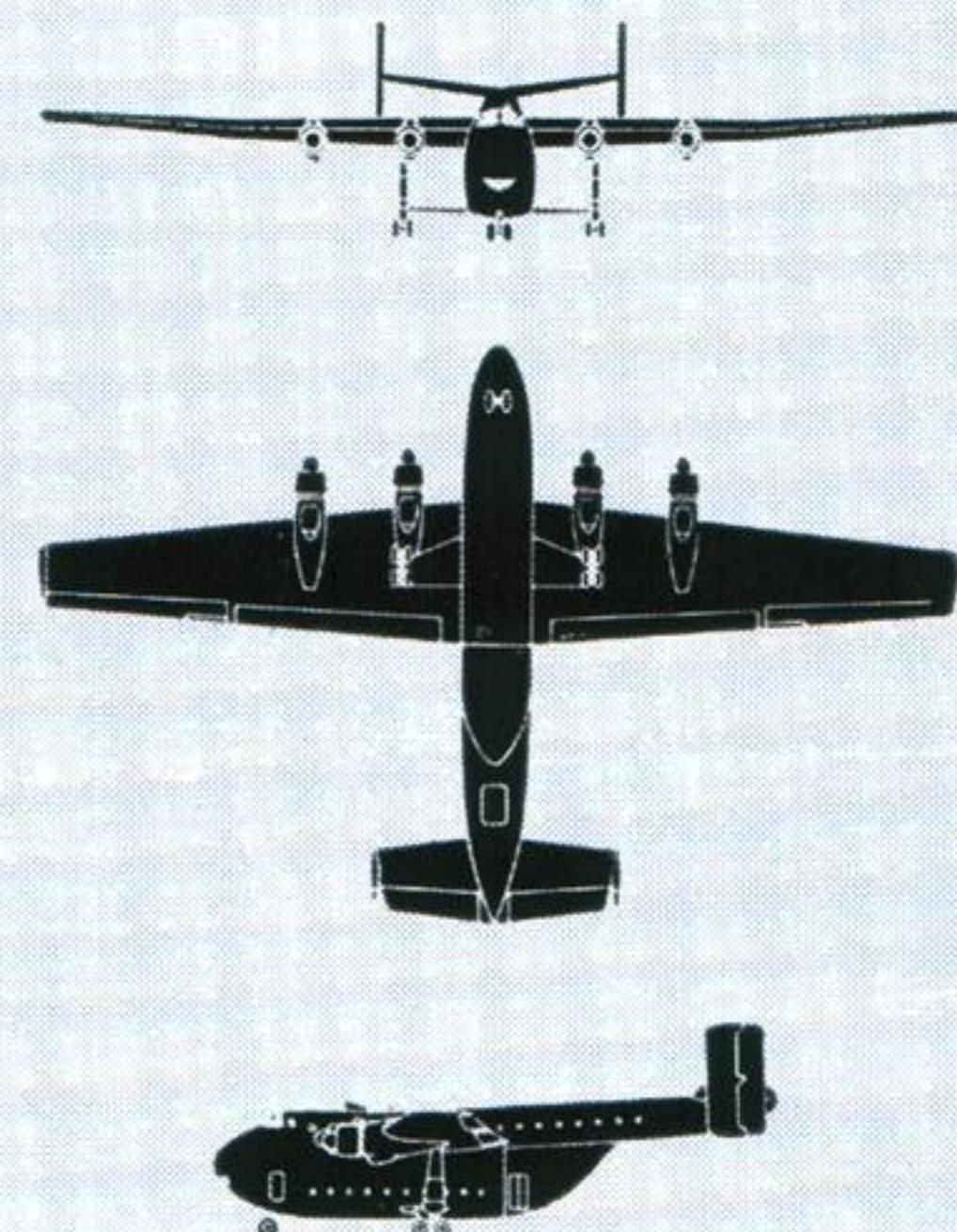
PROVENCE This civil version of the Sahara, until recently used by Air France, is used by the French Army in the Pacific. Span 141 feet



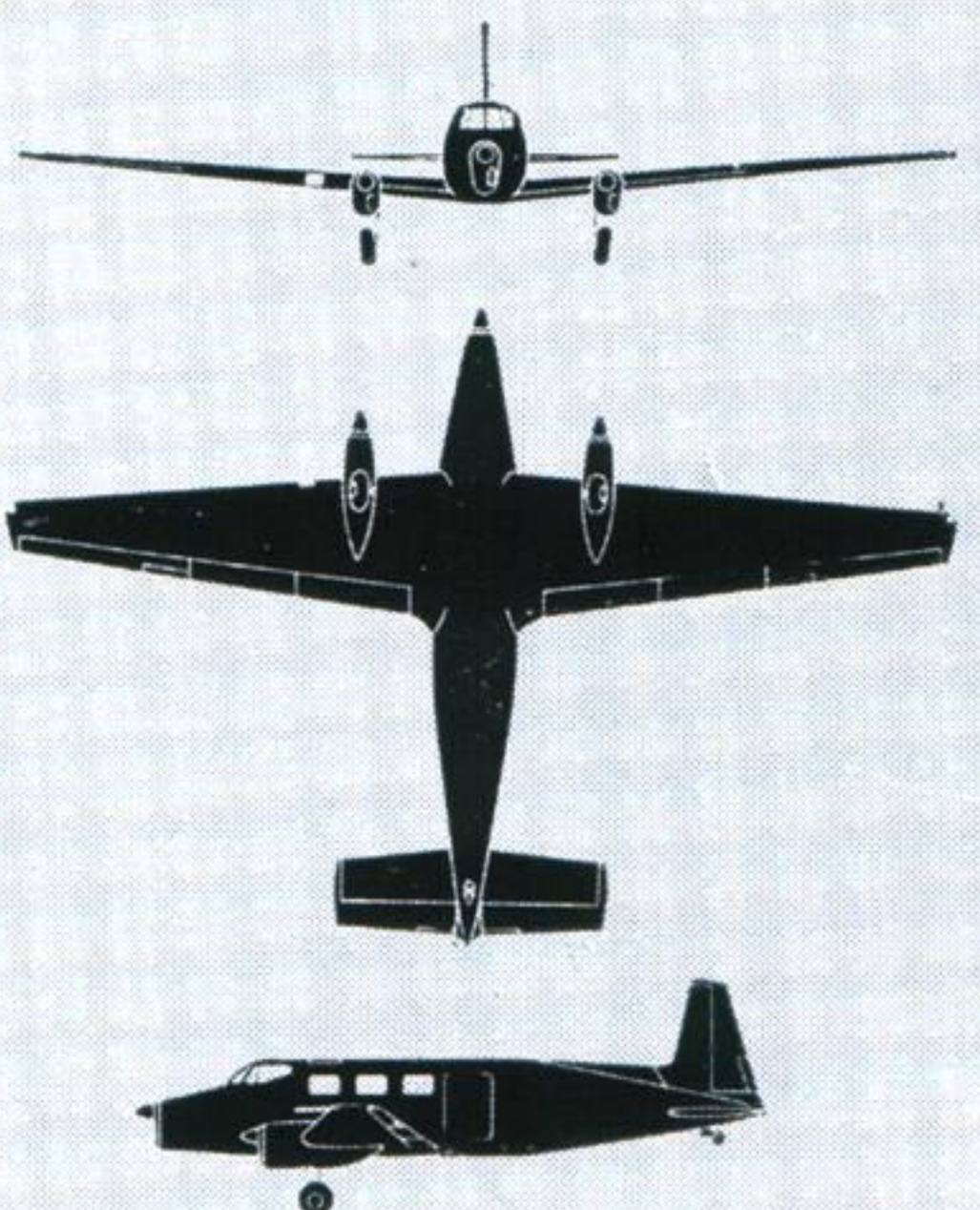
SAHARA The Breguet 765 transport, used by the French Army, can accommodate up to 146 troops or alternatively an AMX tank. Span 141 feet



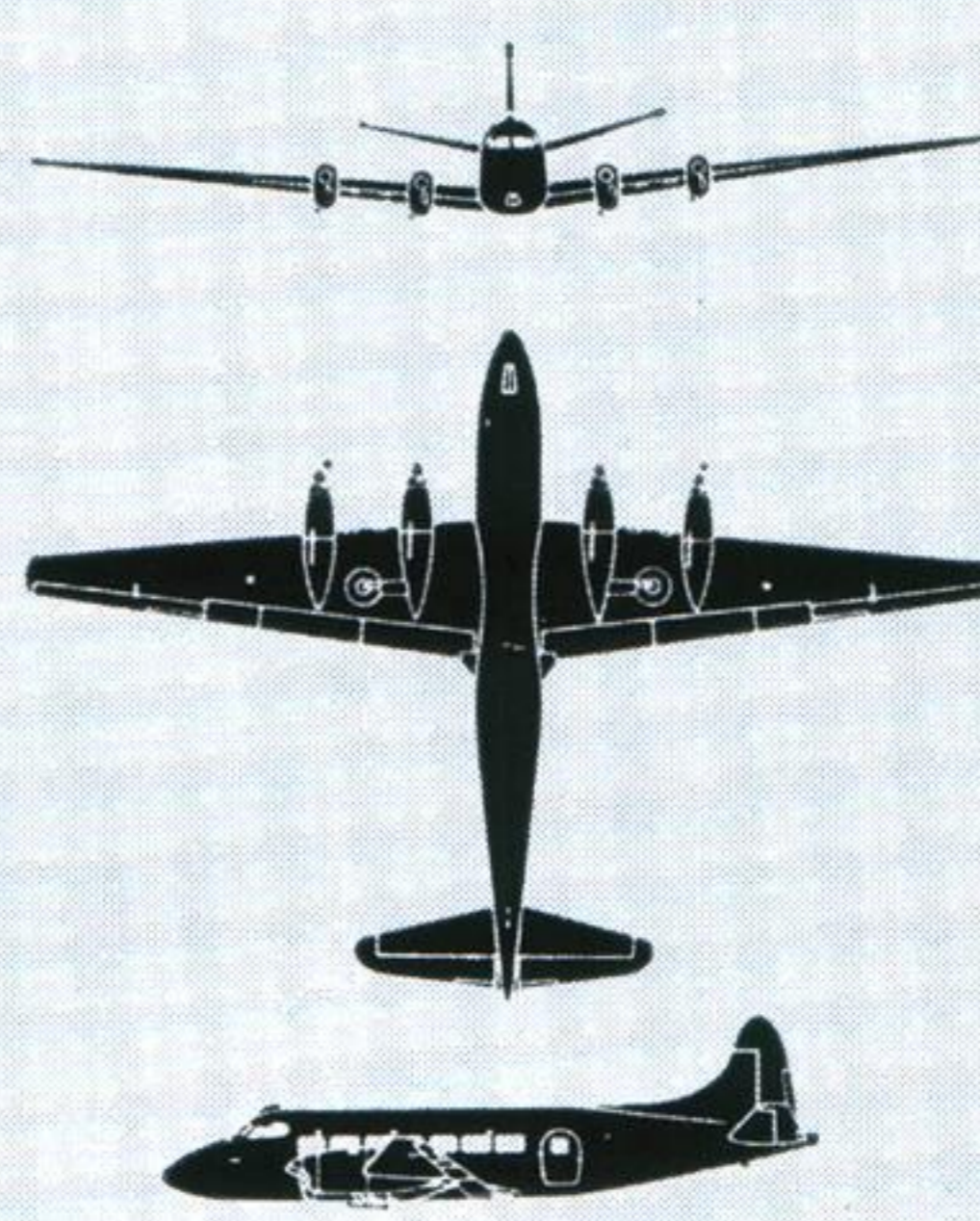
CARVAIR A British modification of the DC-4 Sky-master, with DC-7 type fin and rudder, for the conveyance of cars of which it can carry five at a time with 22 passengers. Span 117 feet



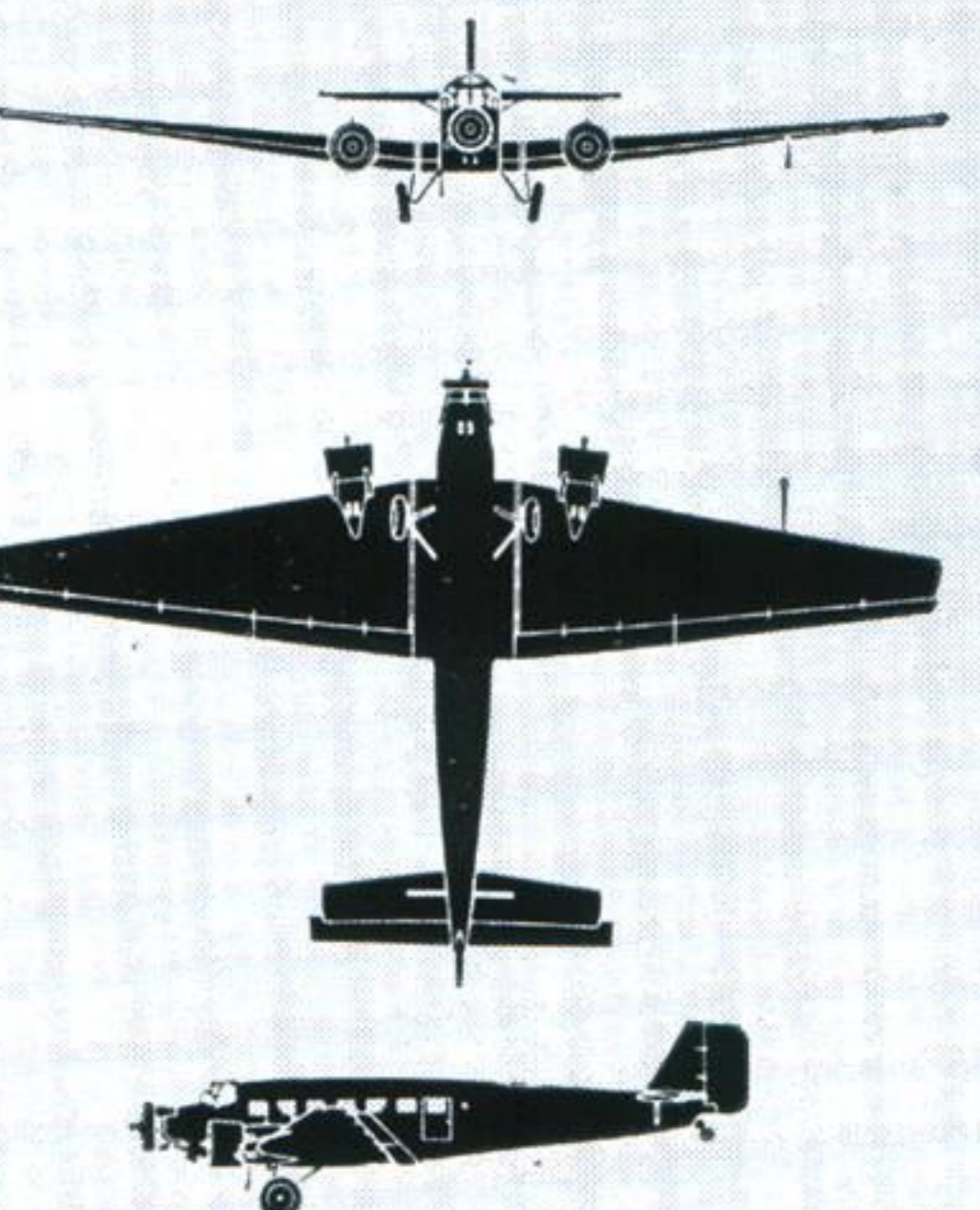
BEVERLEY The single C.1 version is a standard freighter in R.A.F. Transport Command. Span 162 feet



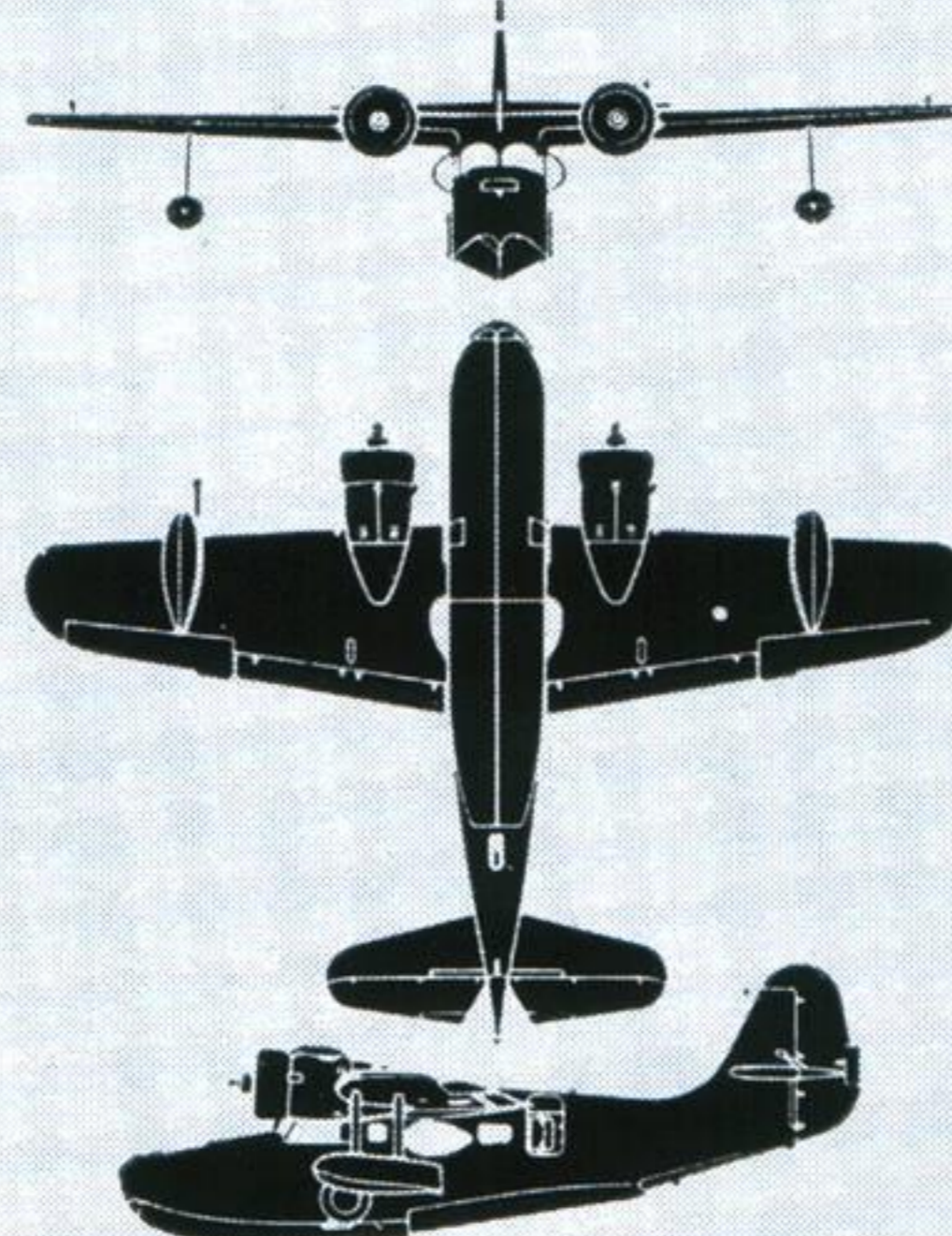
DROVER Basically a three-engined Dove, the Drover was built by De Havilland of Australia in which Commonwealth it is still operated. Span 57 feet



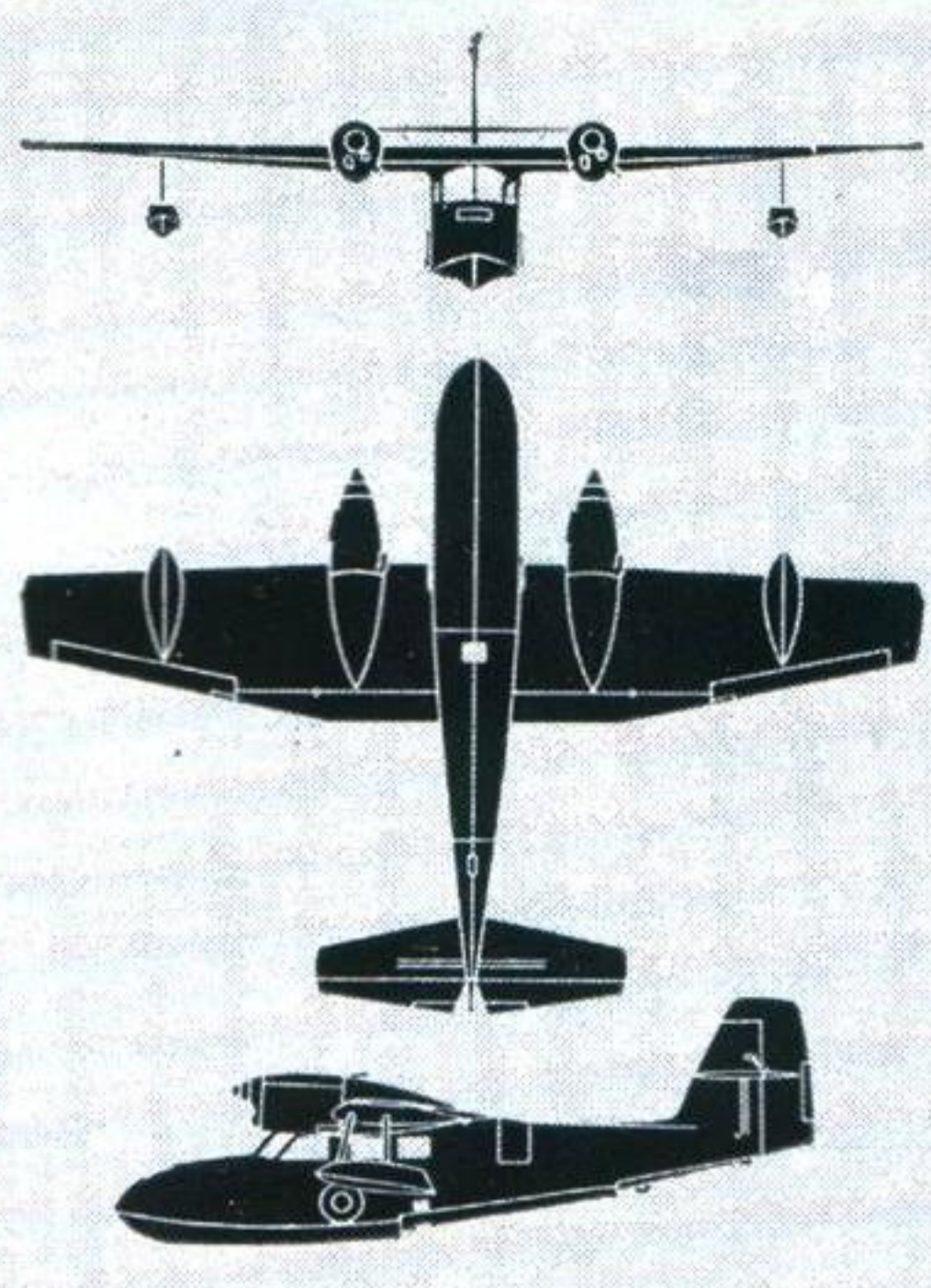
HERON Basically a scaled-up Dove, the Heron is in civil and military use in some 30 countries. Span 71 feet



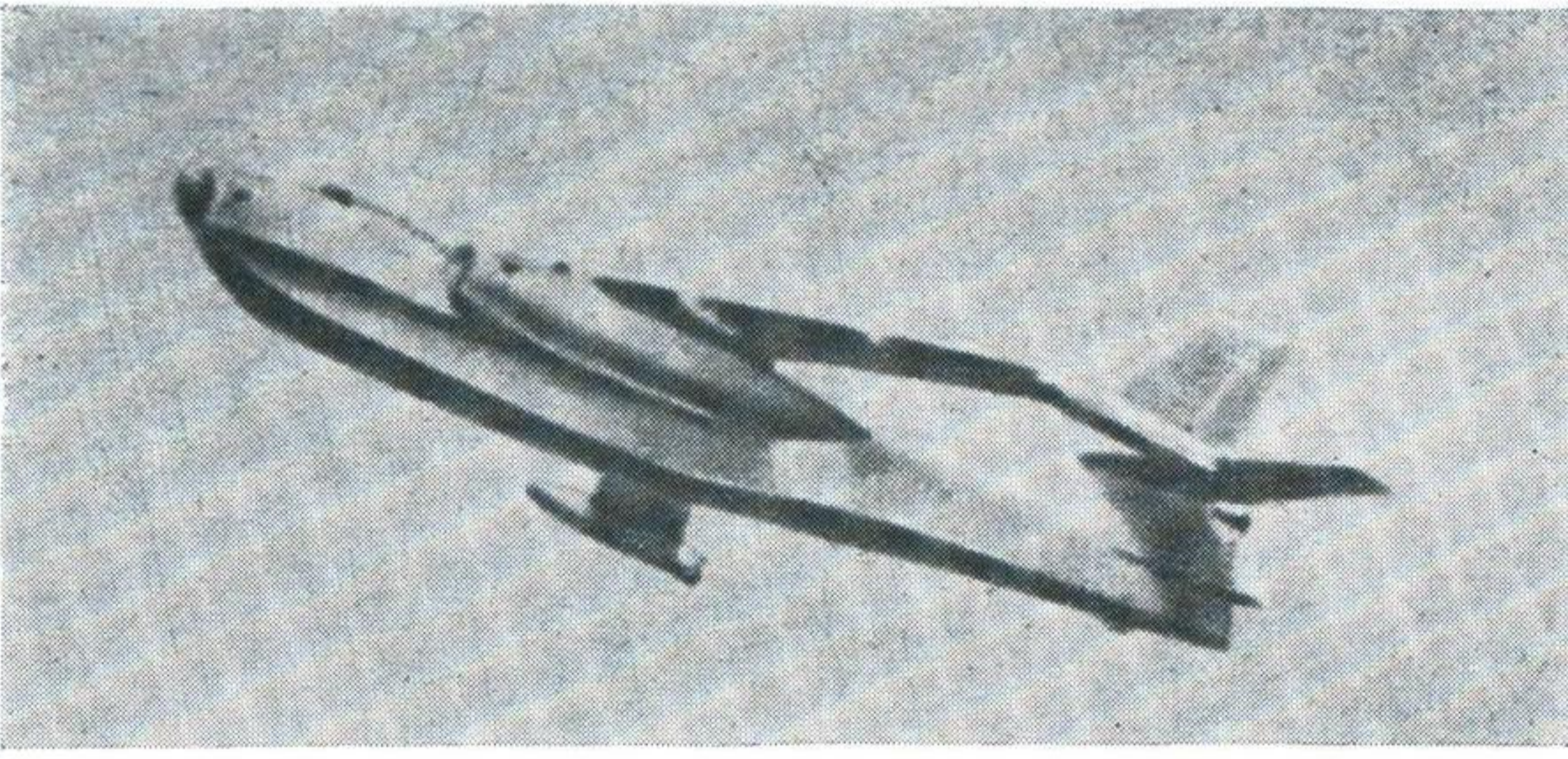
JUNKERS Ju 52/3M Pre-war and wartime troop transport of Germany, the Ju 52/3m is still in limited military use by several countries. The 3m denotes three engines. Span 100 feet



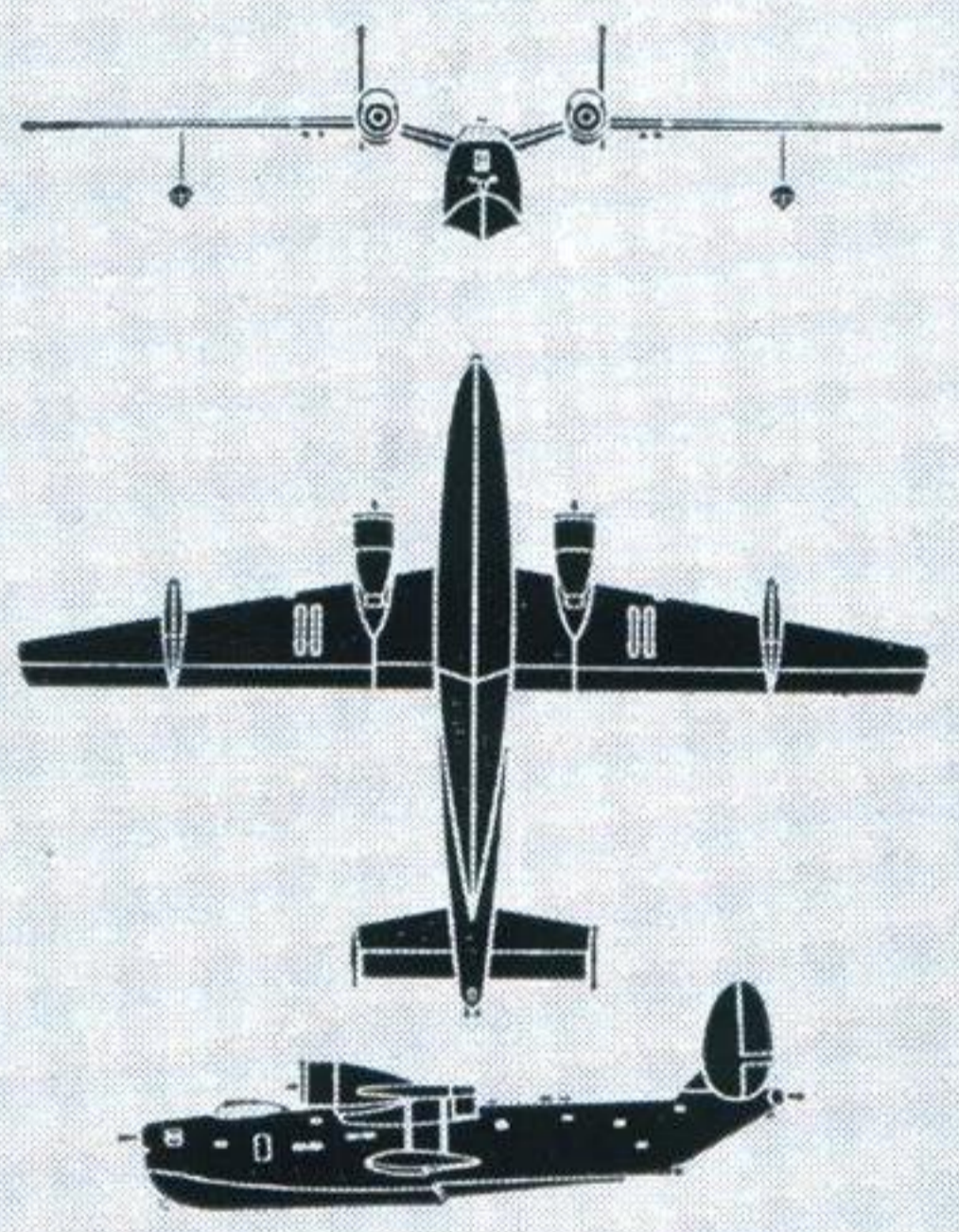
GOOSE A twin-engined amphibian produced mainly to military orders commencing pre-war in the U.S.A., the Goose found a post-war civil market and a number are still in use. Span 49 feet



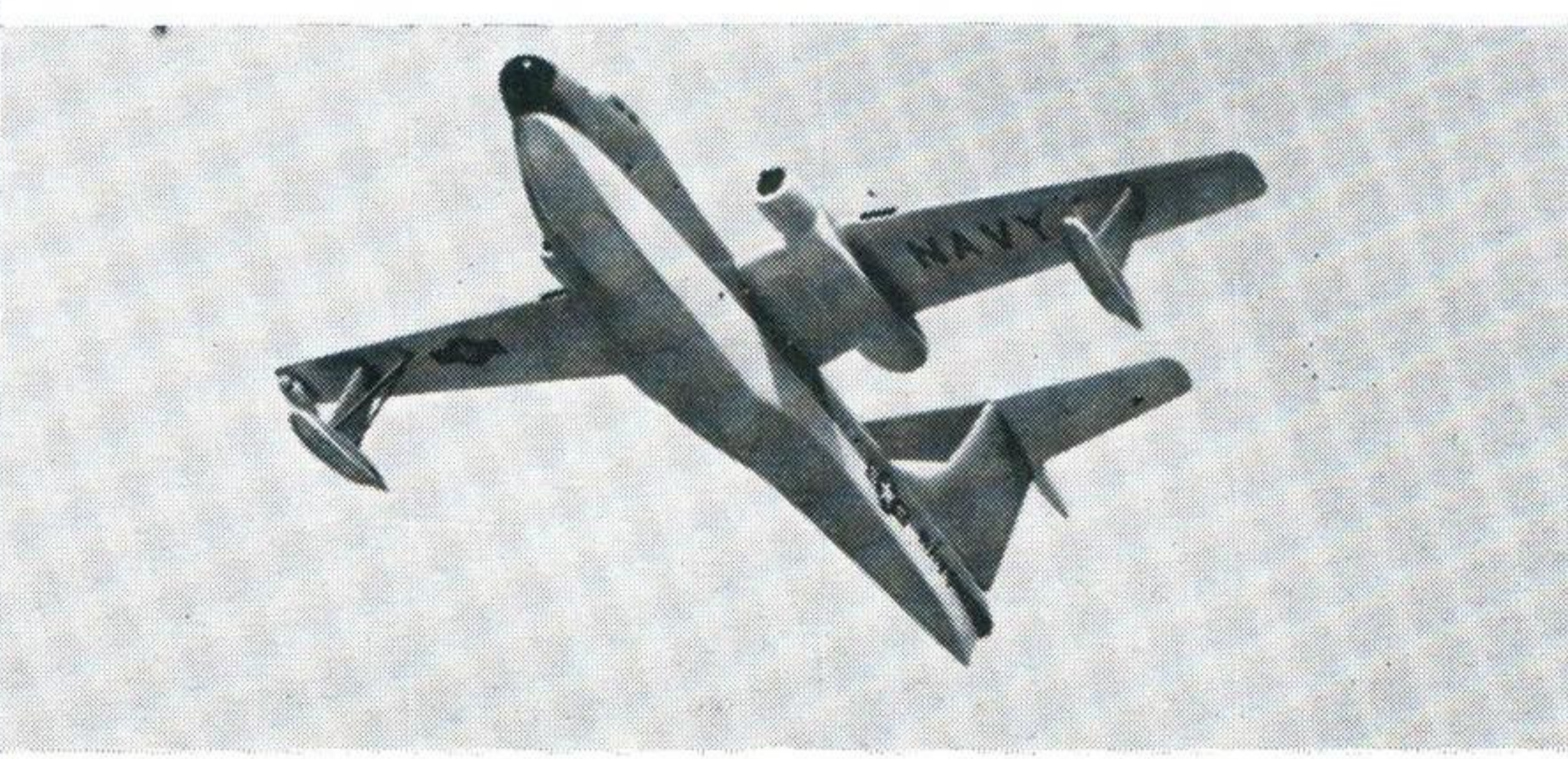
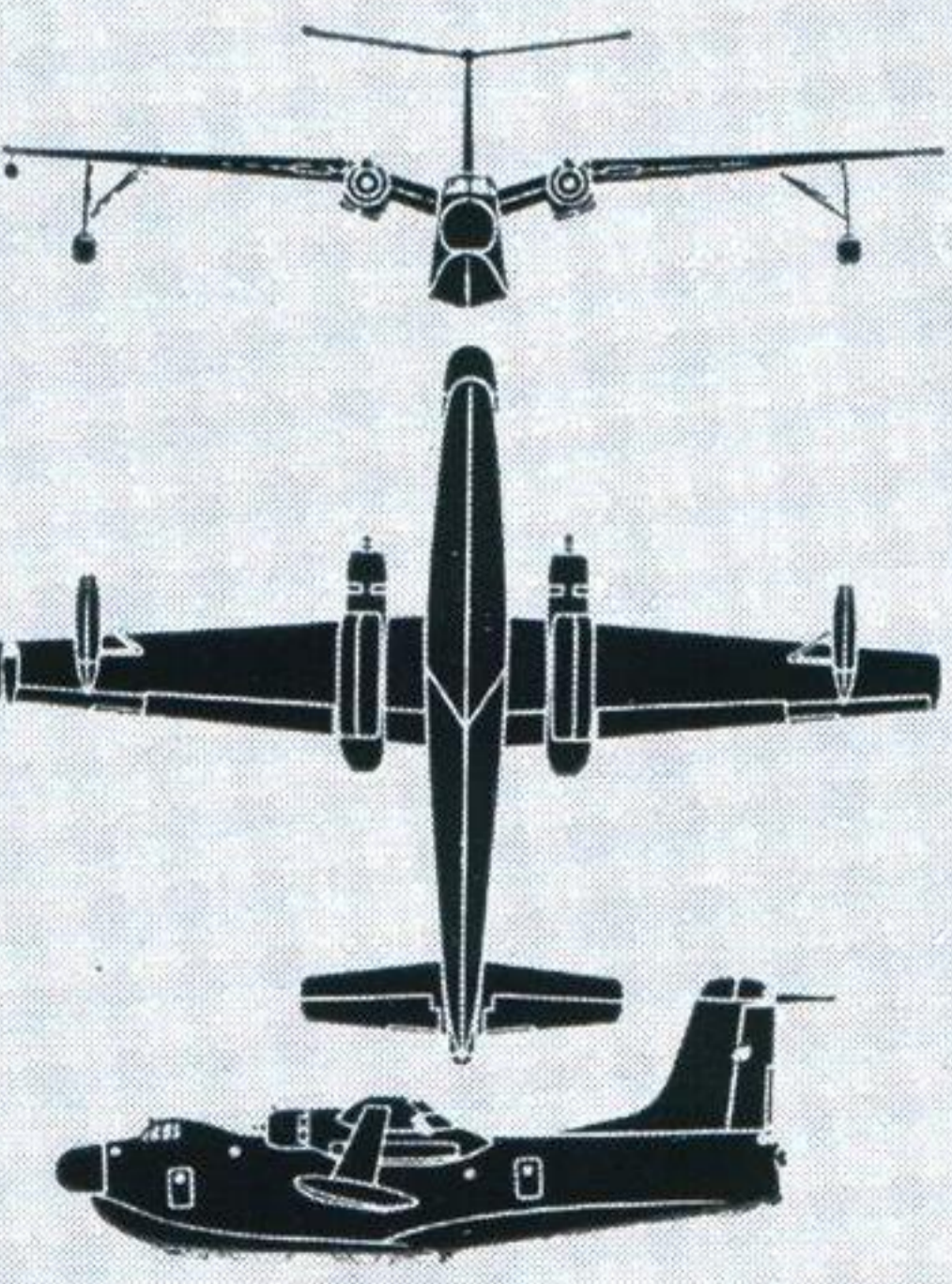
WIDGEON Like the Grumman Goose the Widgeon, by the same firm, was built largely to military orders although designed for a civil market with which it found favour post-war. Span 40 feet



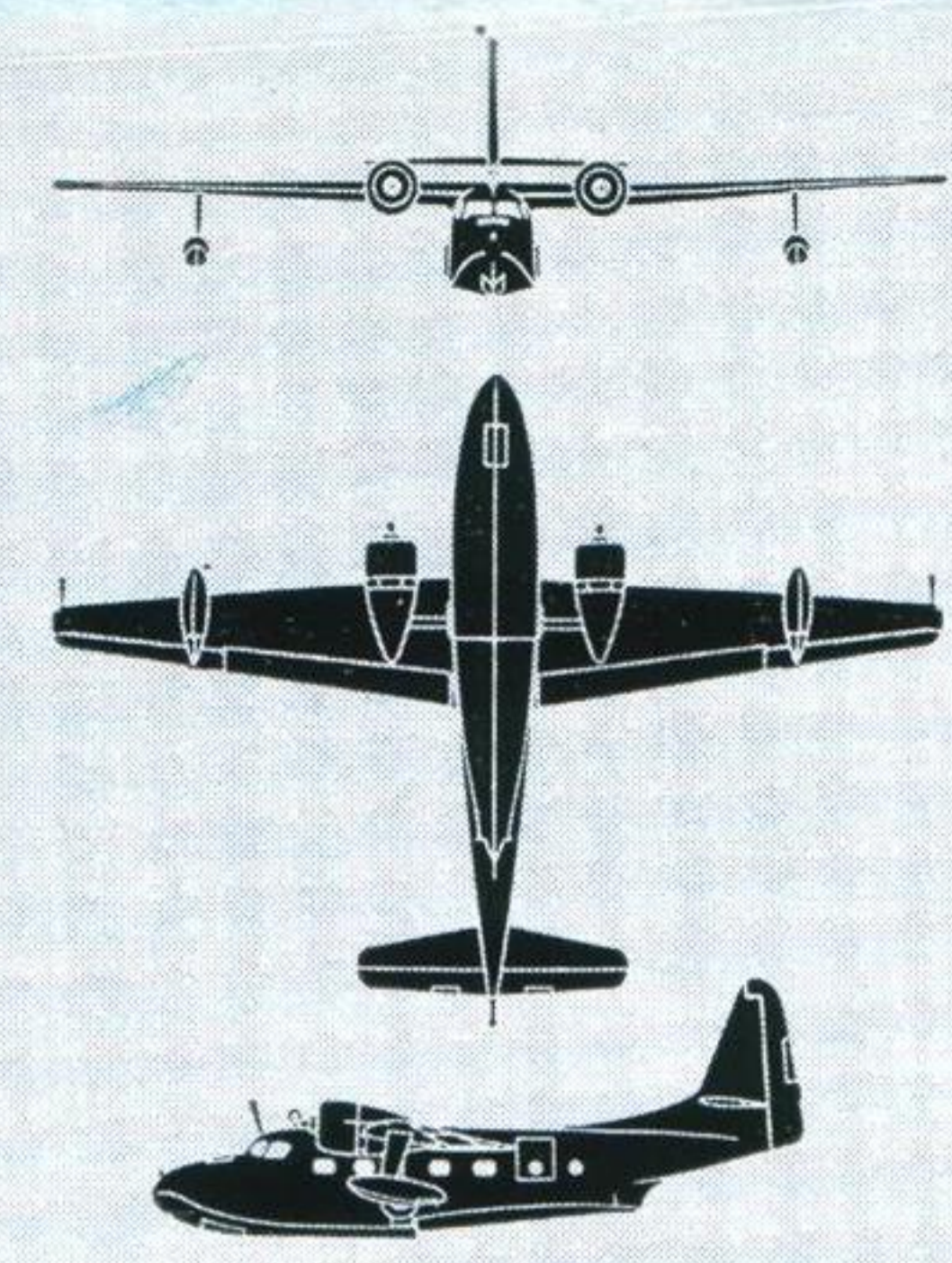
MALLOW Russia's turbojet flying boat which may be seen with under-wing pylons carrying anti-shiping weapons. Span 50 feet (approx.)



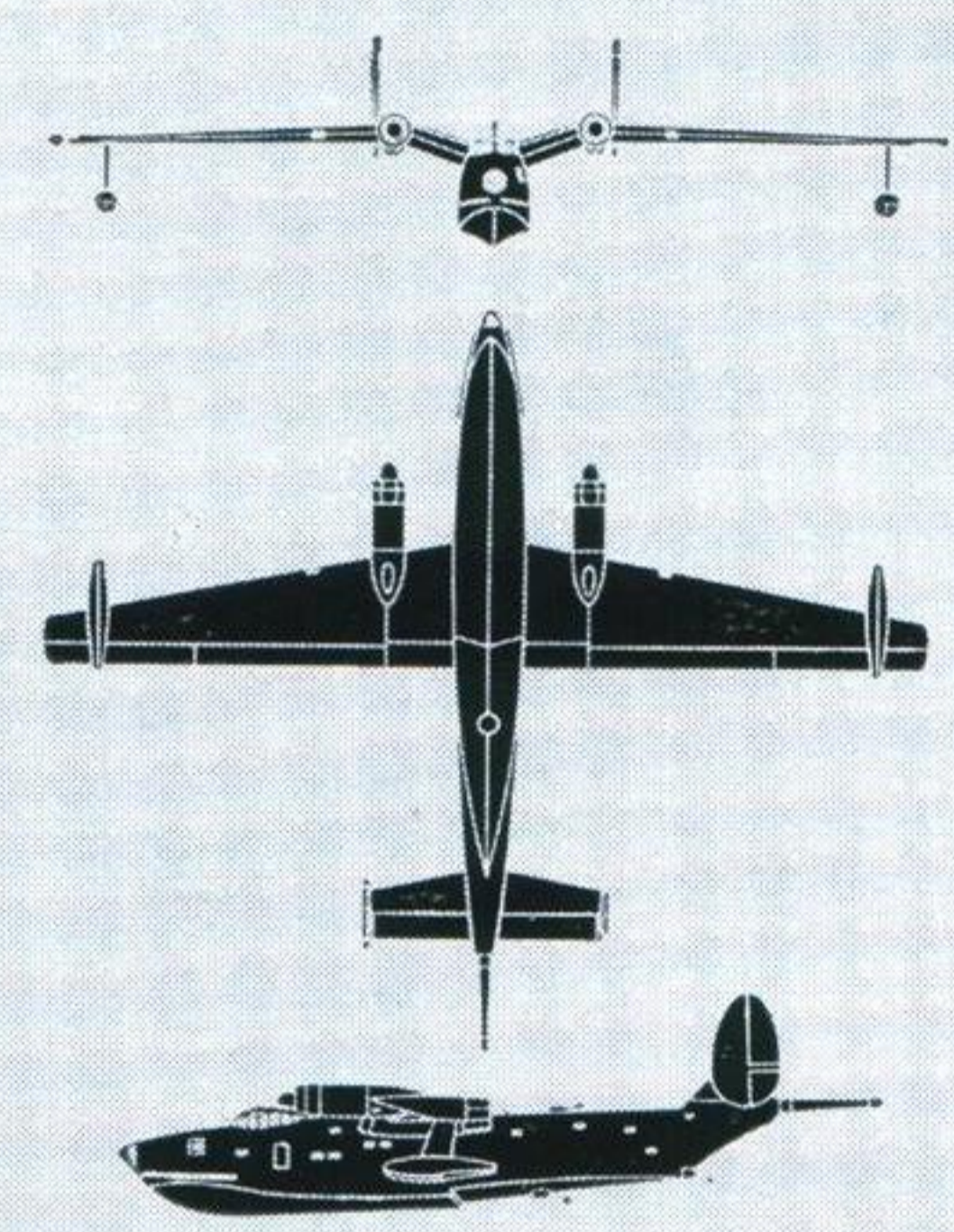
MADGE Long-range reconnaissance flying boat for the Russian fleet, the Madge may be seen with radome extended beneath the hull, or with extended "sting" tail. Span 108 feet



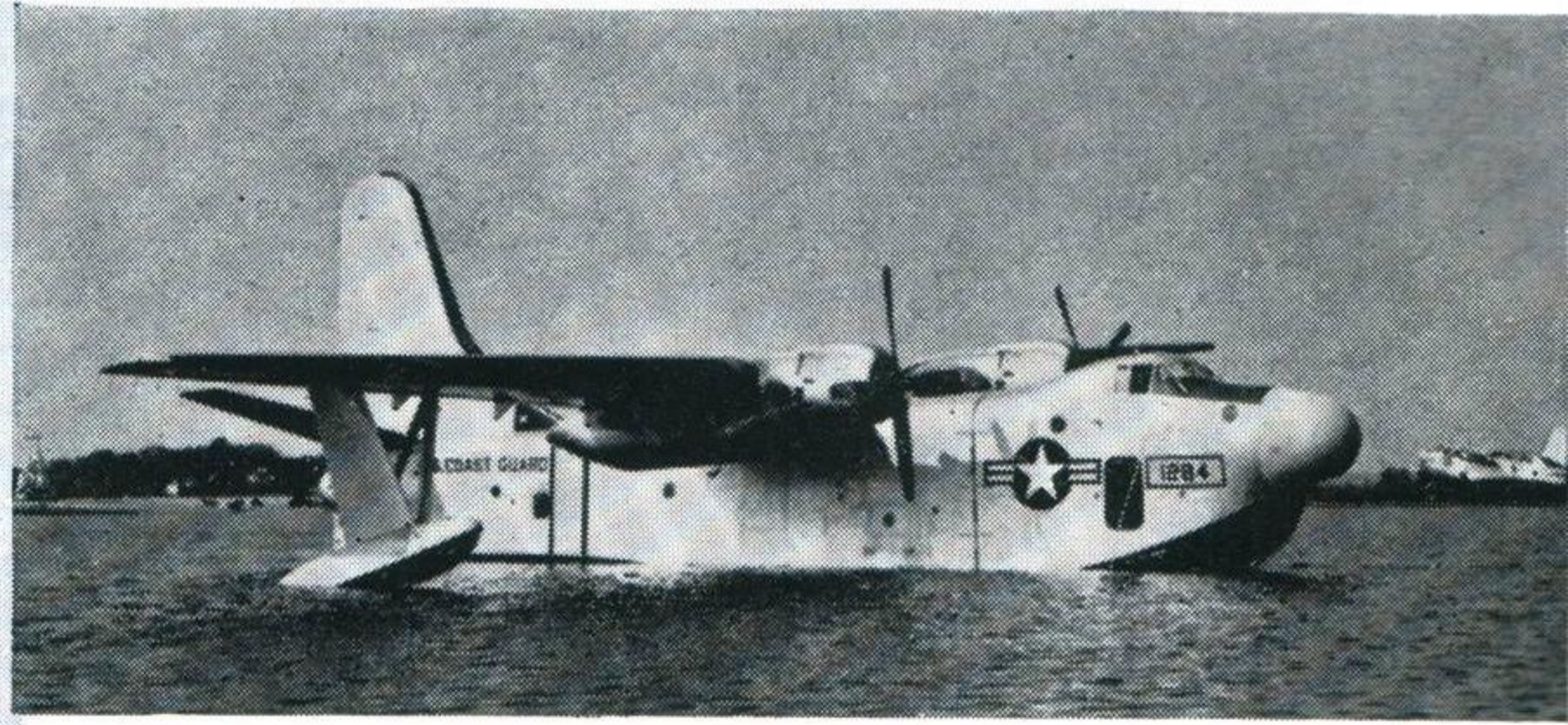
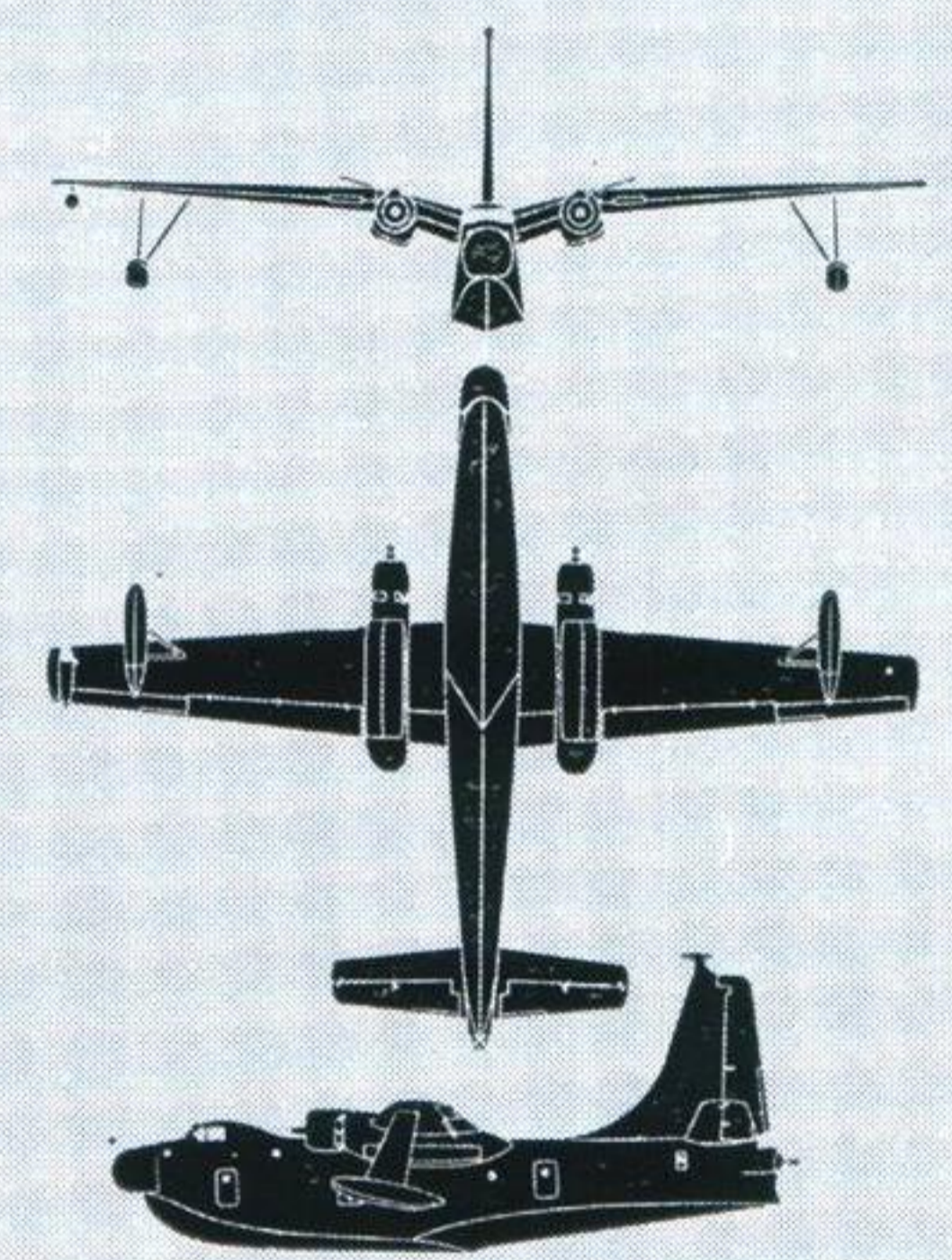
MARLIN A new lease of life from jet-engine assistance in taking off is being investigated to increase the operational life of this P-5B flying boat of the U.S. Navy. Span 118 feet



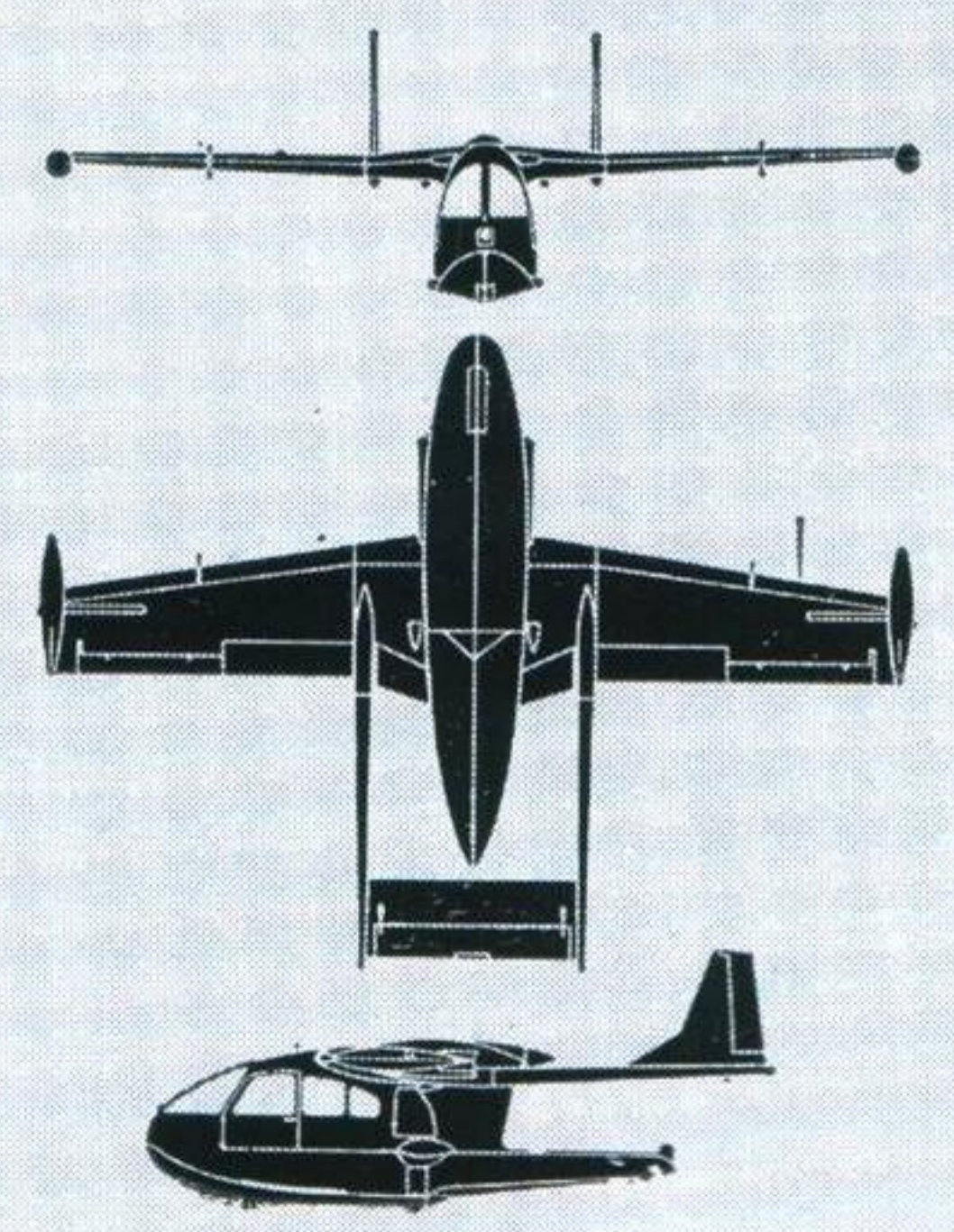
MALLARD Post-war executive amphibian by Grumman, the Mallard is used mainly in the U.S.A. and Canada. Span 67 feet



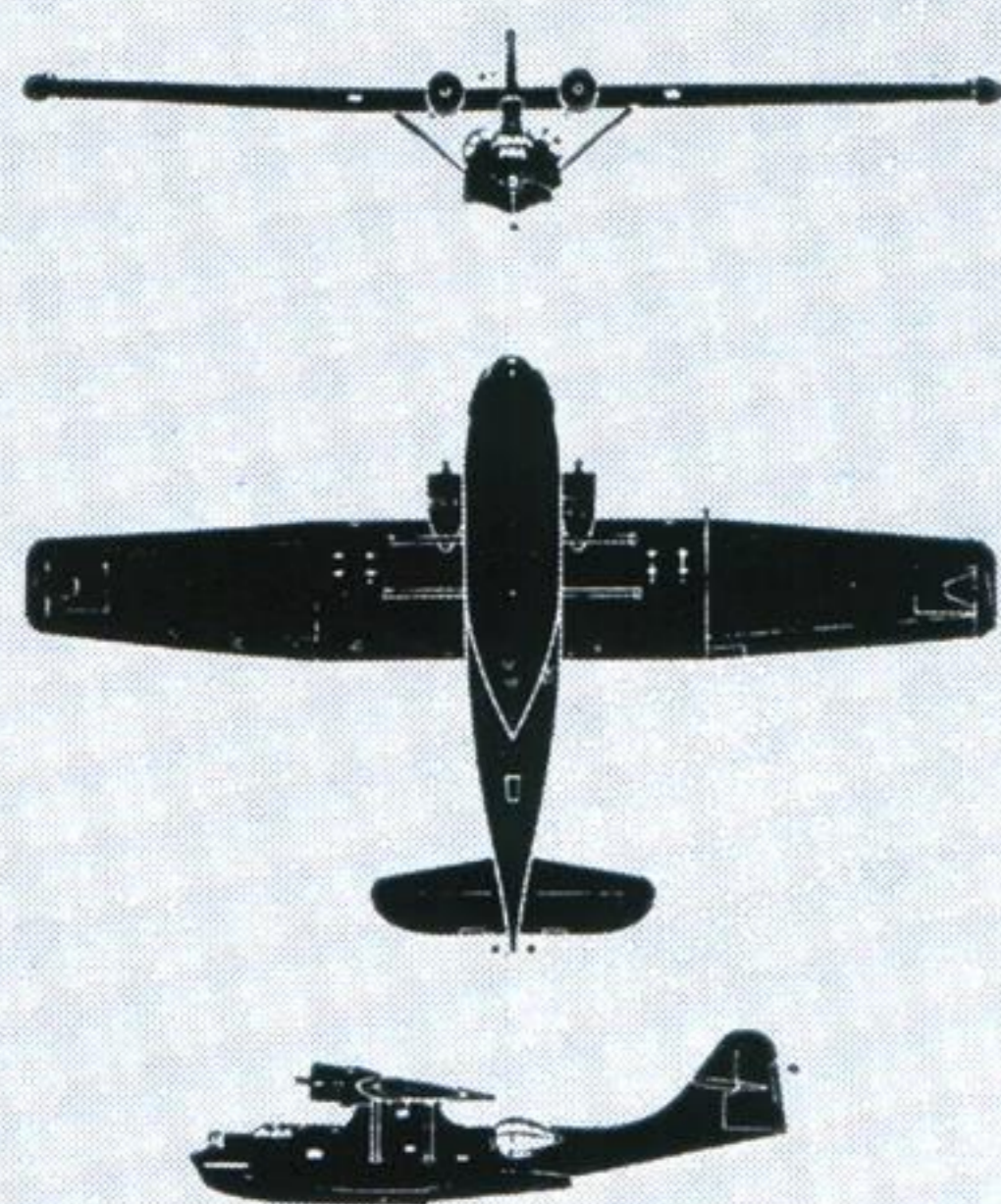
MAIL A Russian turbojet flying boat of which little has been reported recently.



MARLIN The Marlin was produced in two versions and the earlier version P-5A shown is used mainly for training by the U.S. Navy. Span 118 feet



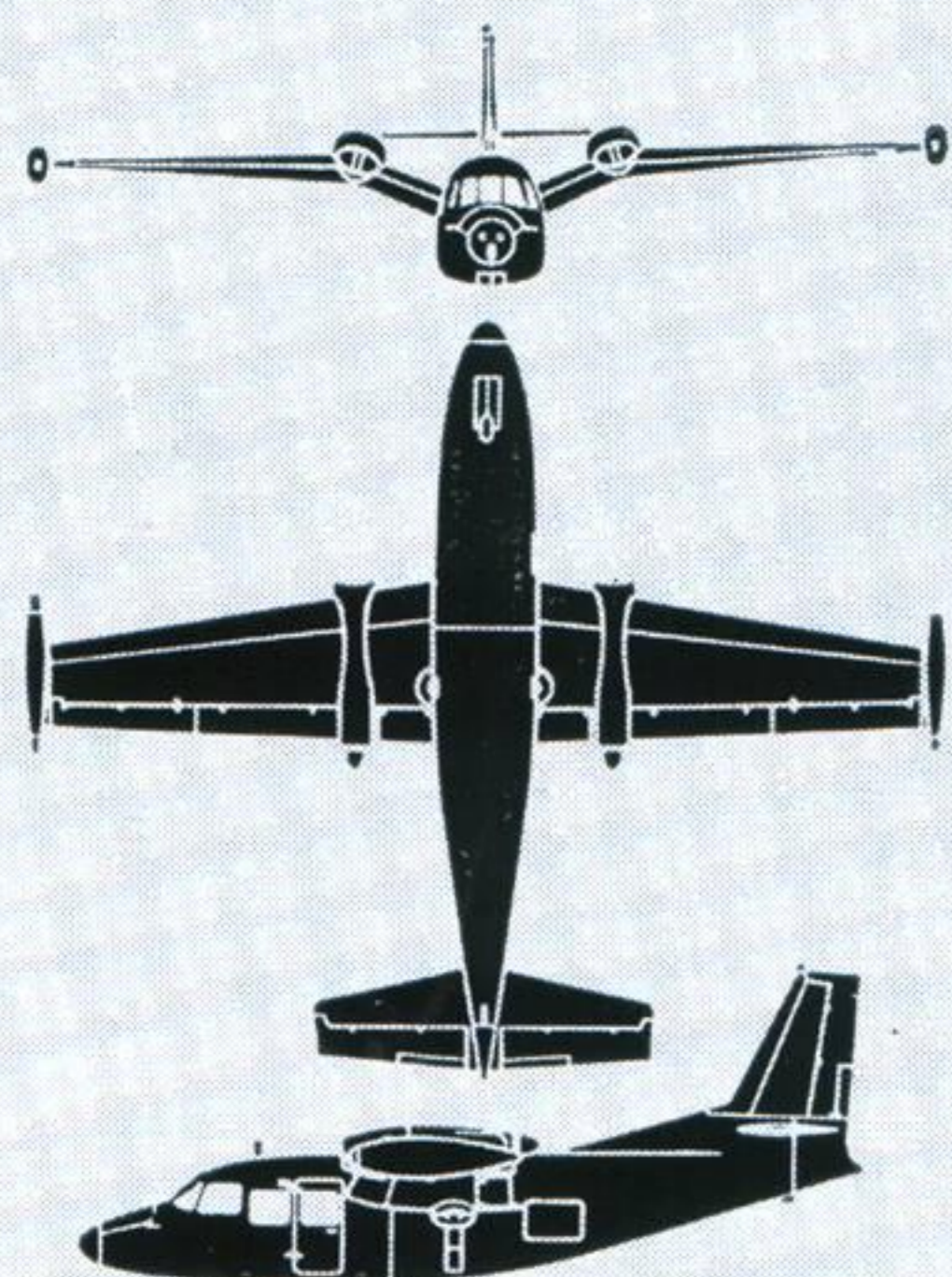
RIVIERA An Italian-built light amphibian with a U.S. market. Span 34 feet



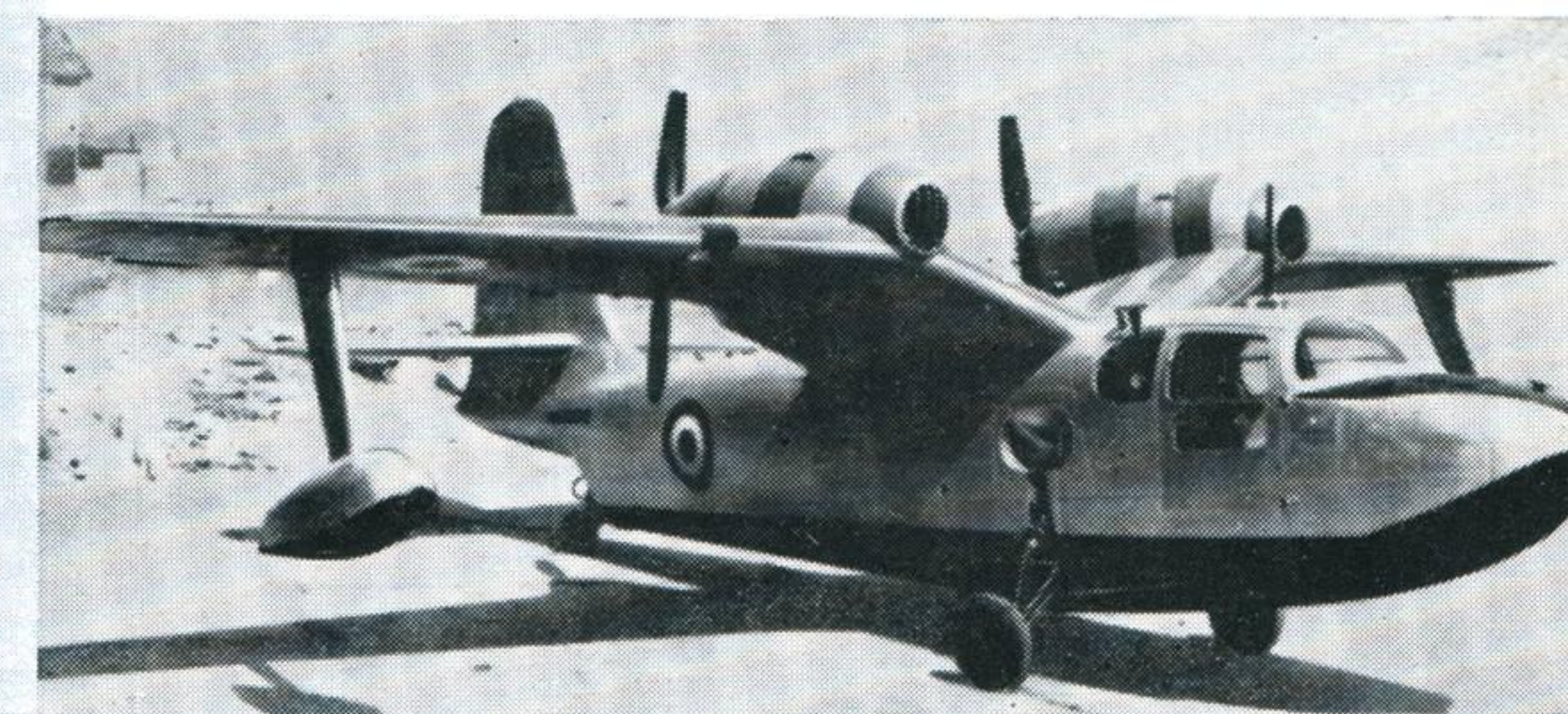
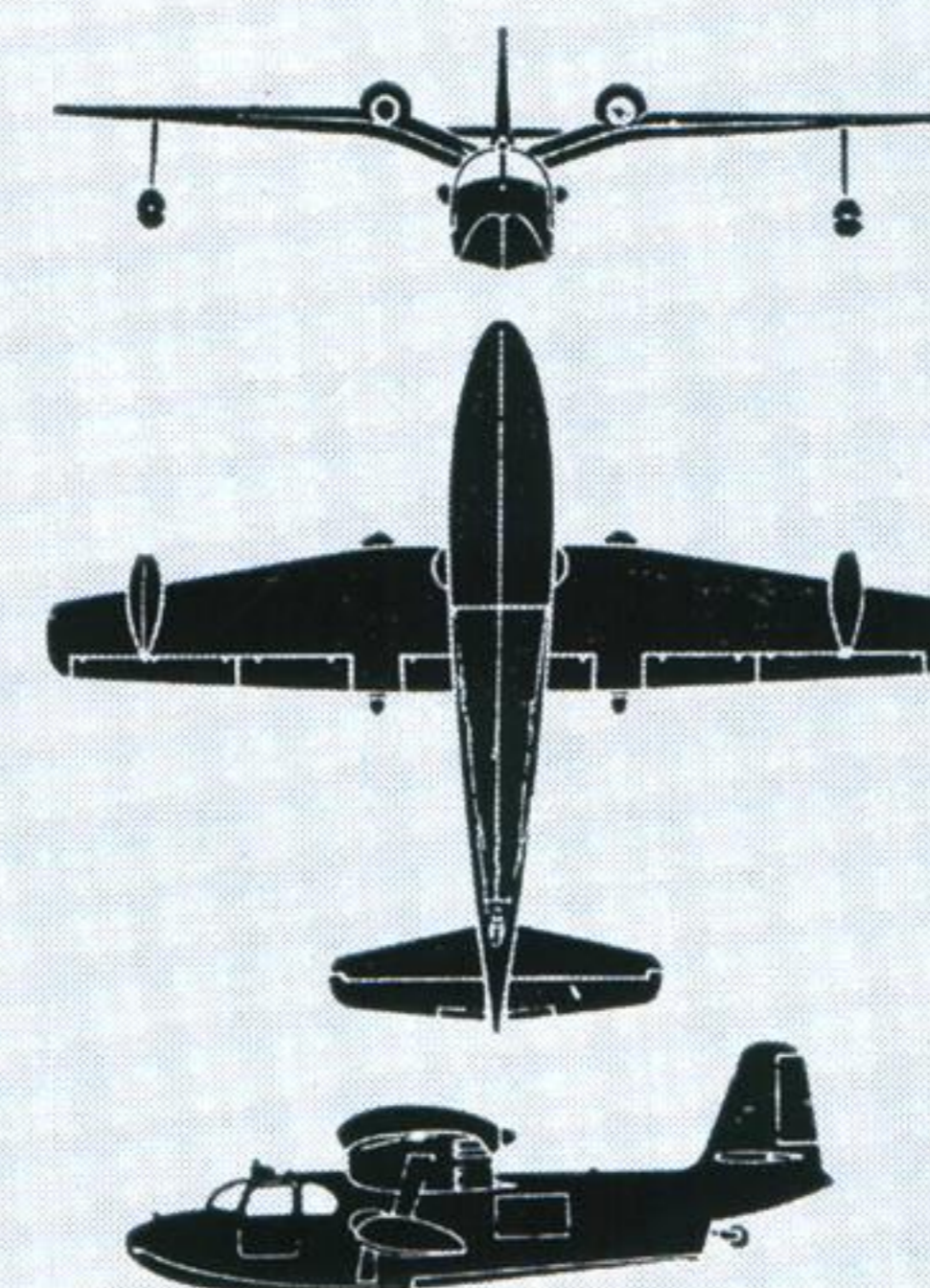
CATALINA Famous as a wartime flying boat, a number are still in use world-wide for both maritime reconnaissance and as civil transports. Many were supplied to Russia under Lend/Lease. Span 104 feet



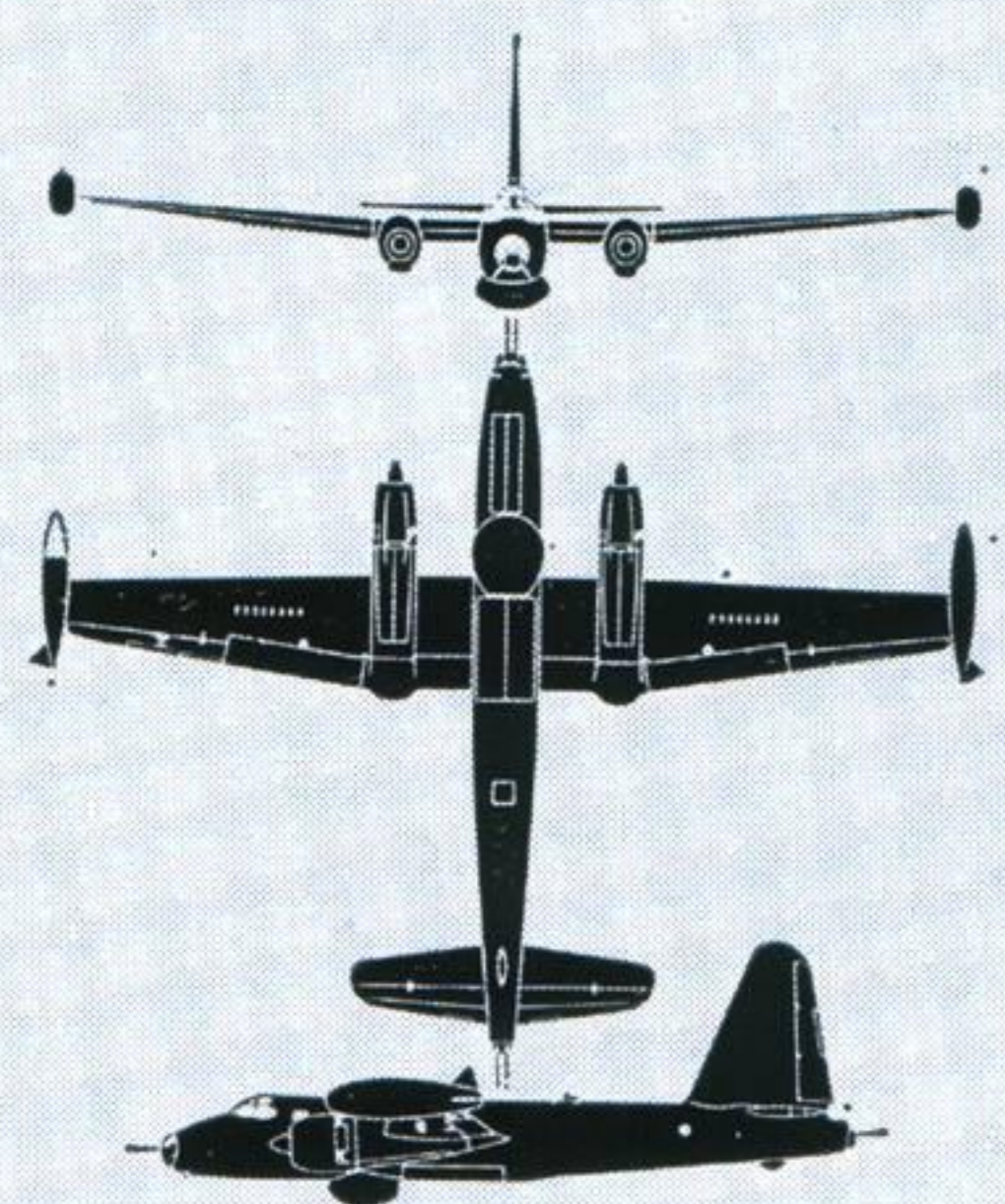
ALBATROSS The several versions of the Albatross in service with various forces vary mainly in span, length, nose radome size and fin and rudder shape. HU-16 in U.S. service. Span 80 and 97 feet



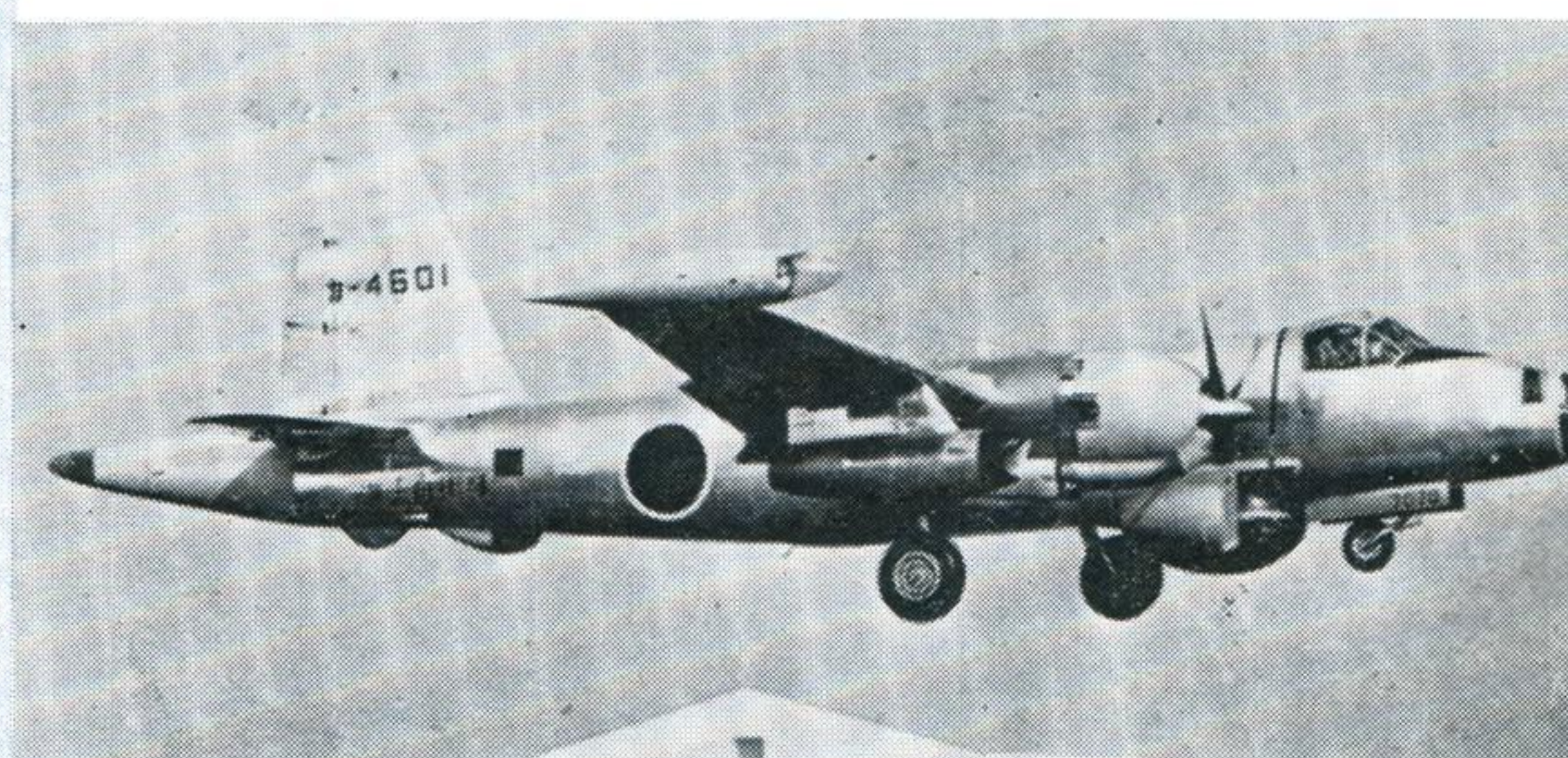
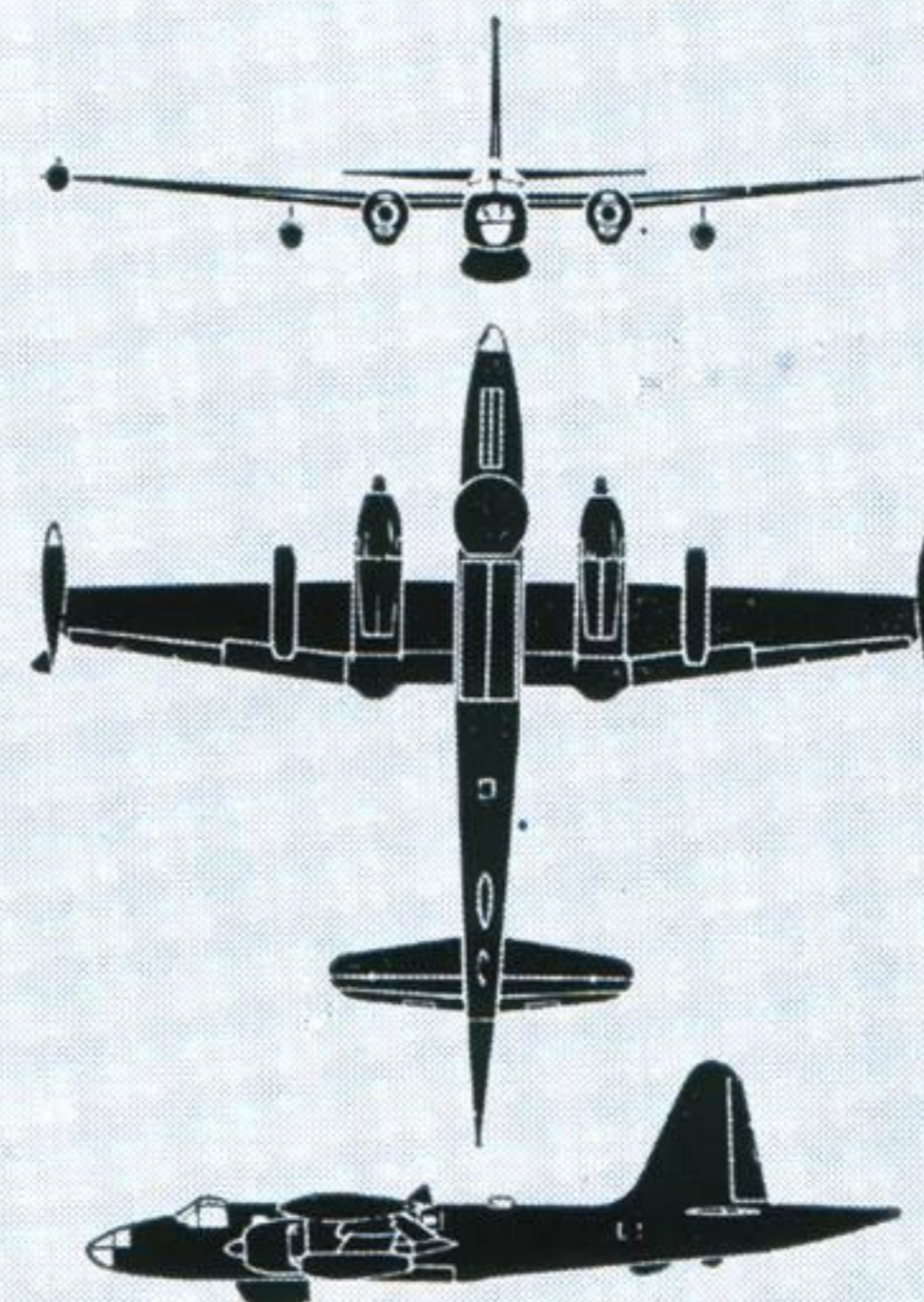
PIAGGIO P.166 An Italian-built military transport (P.166M) and civil transport (P.166B Portofino); the latter version has a re-designed cabin with a lengthened nose. Span 47 feet



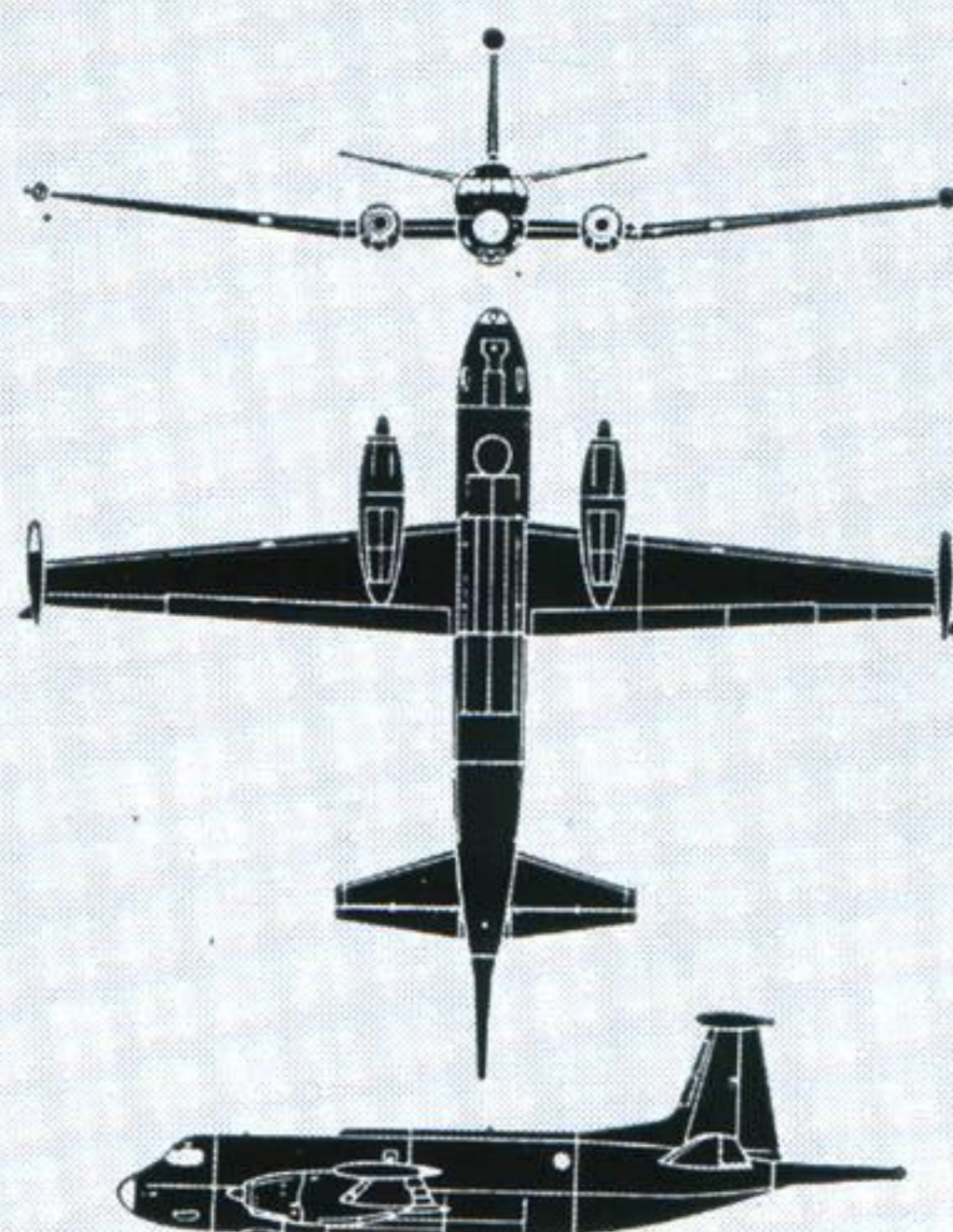
PIAGGIO P.136 This five-seat amphibian was built in Italy for both the Italian Air Force and civil use. It is marketed in the U.S.A. as the Trecker Gull. Span 44 feet



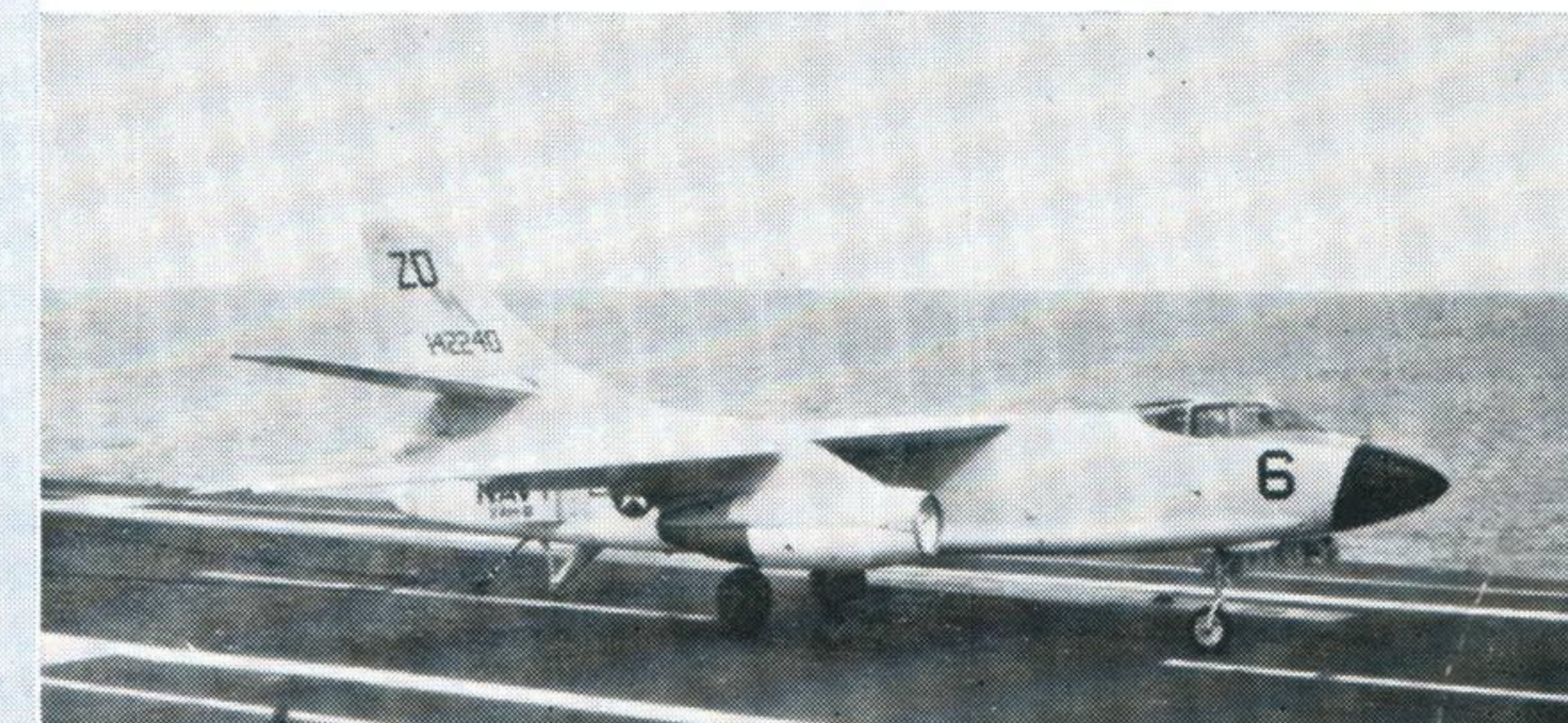
NEPTUNE A version once used by the R.A.F. and still in use in other countries for maritime reconnaissance. Span 100 feet



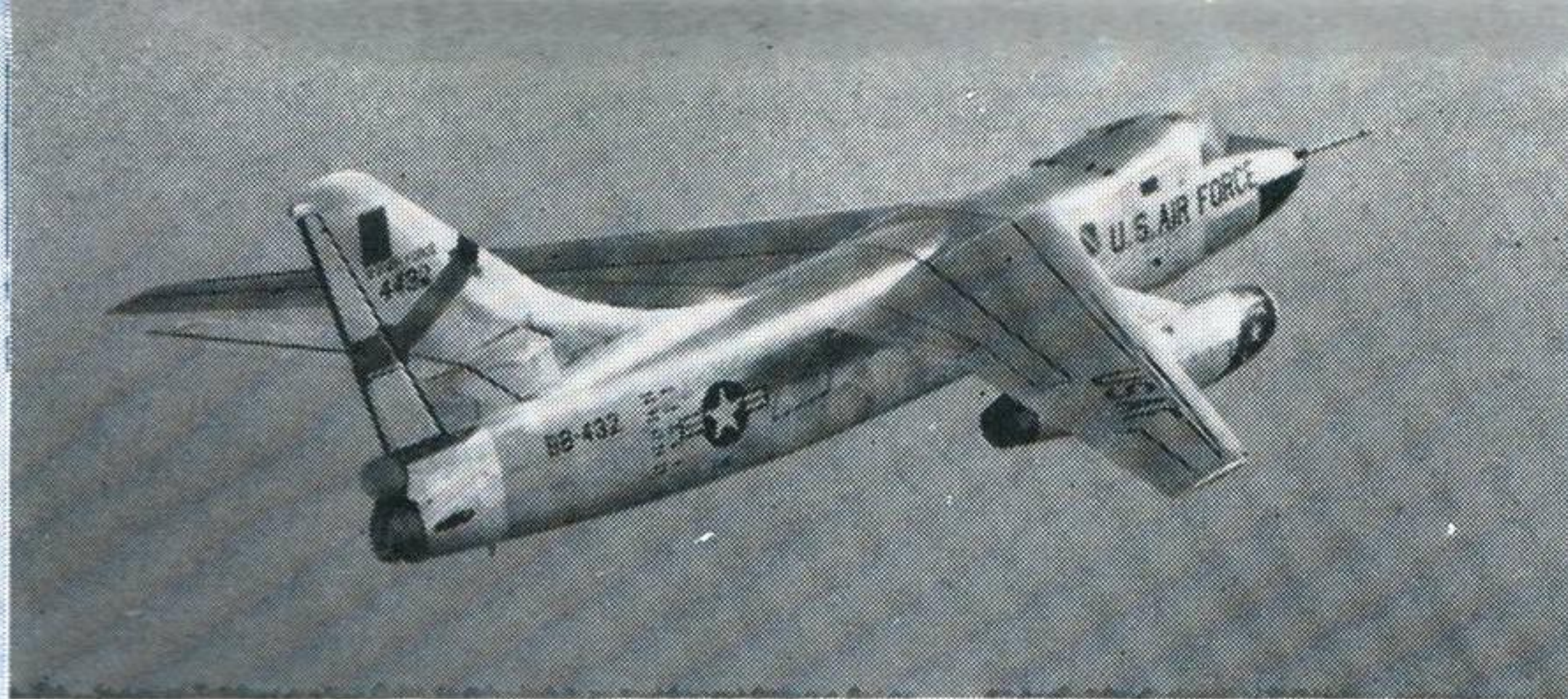
NEPTUNE Latest model of the Neptune maritime reconnaissance aircraft which is used by the U.S. Navy (P-2H) and several other nations including Japan. Span 104 feet



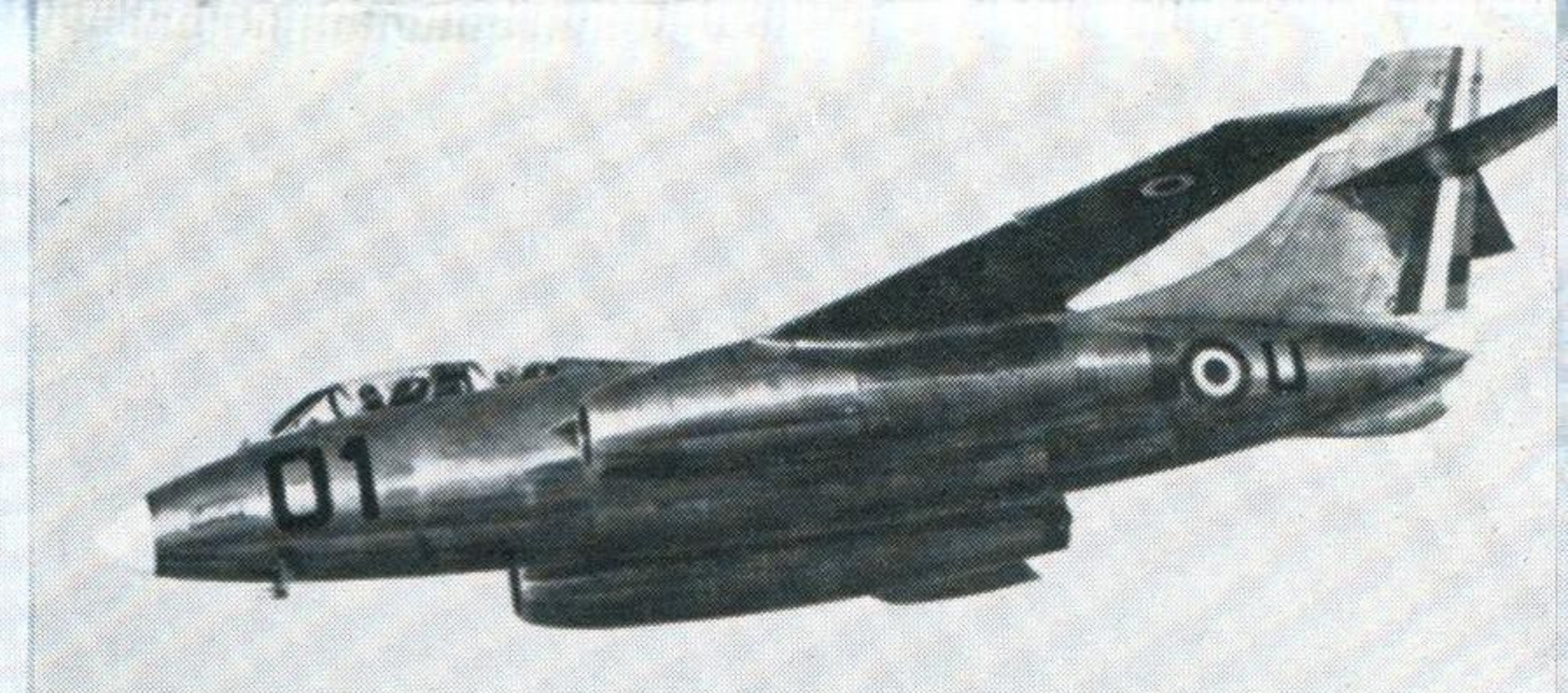
ATLANTIC Built by Breguet under joint Dutch, Belgian, German and French co-operation, this maritime reconnaissance aircraft is expected to enter service towards the end of the year. Span 119 feet



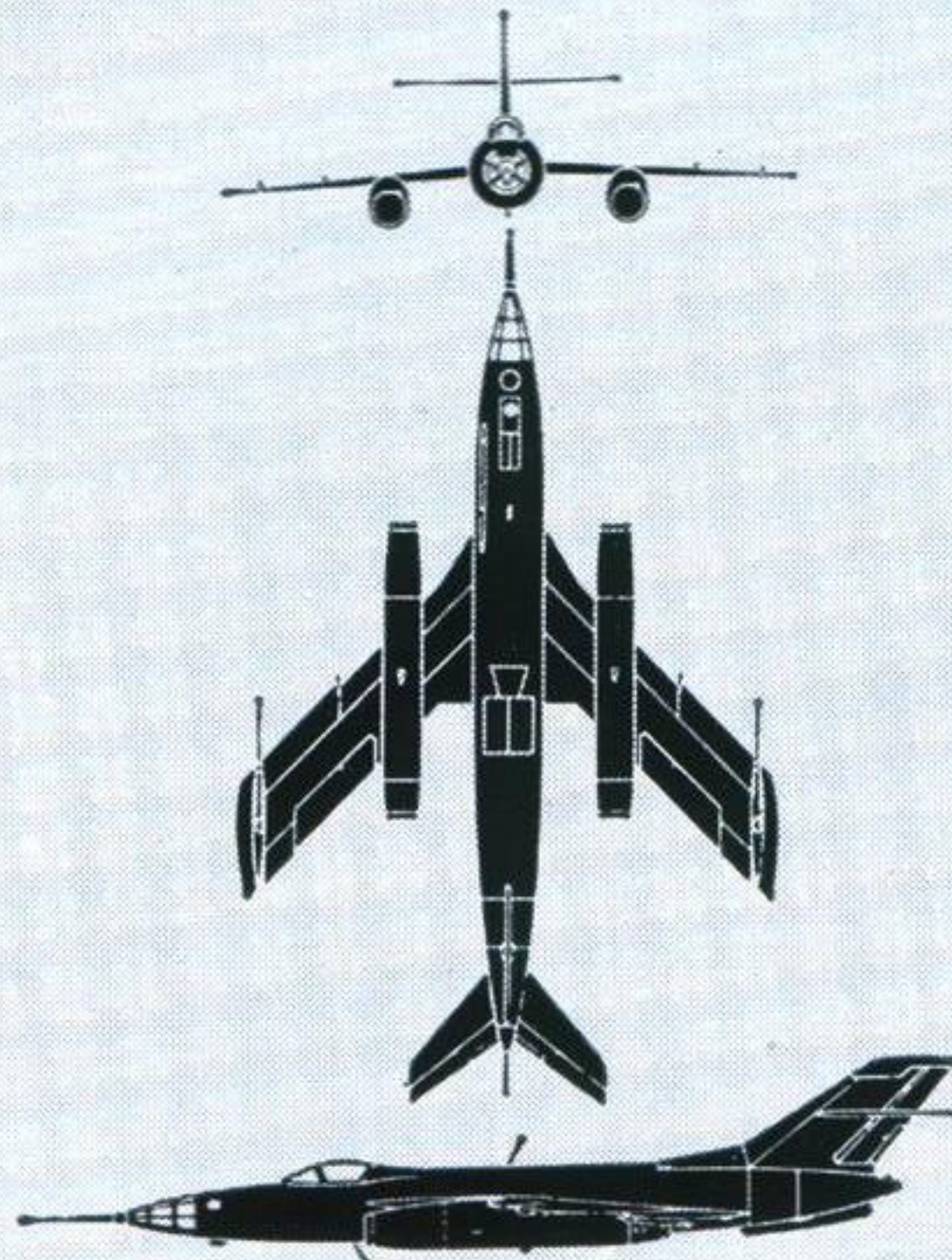
SKYWARRIOR A shipboard attack bomber, the A-3 Skywarrior is the U.S. Navy's counterpart of the B-66 Destroyer of the U.S.A.F. Span 72 feet



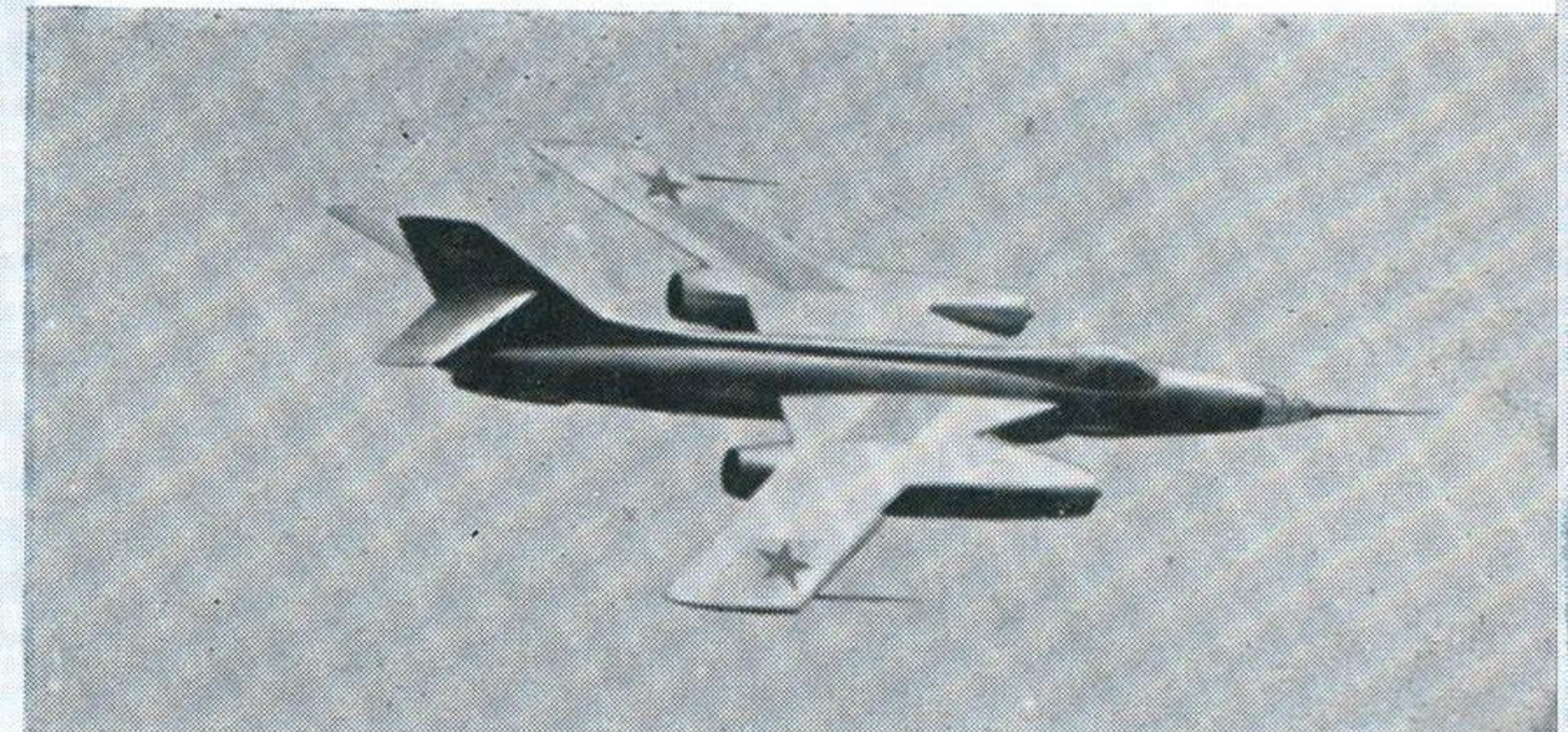
DESTROYER Reconnaissance bomber serving as the B-66 in various versions with the U.S.A.F. Span 72 feet



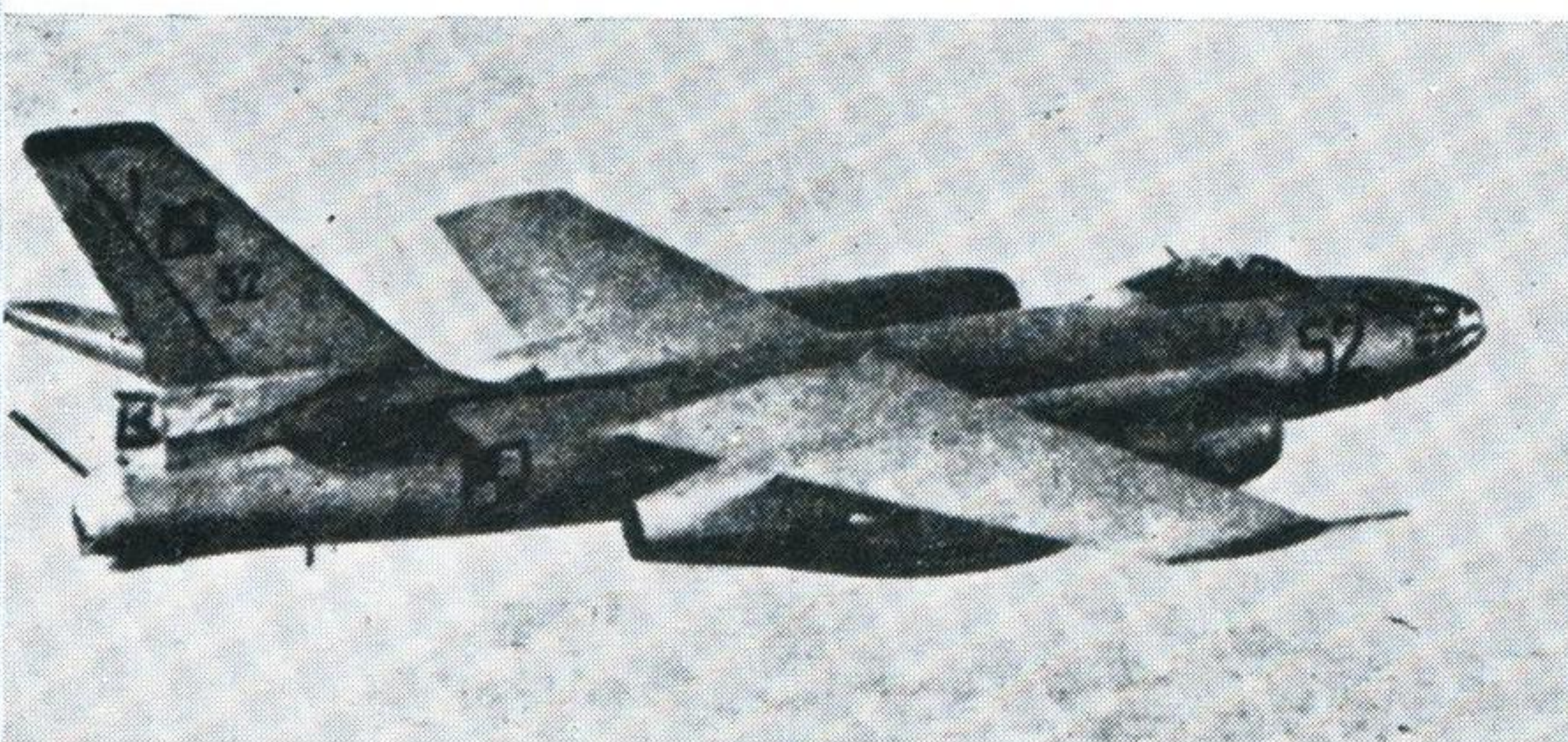
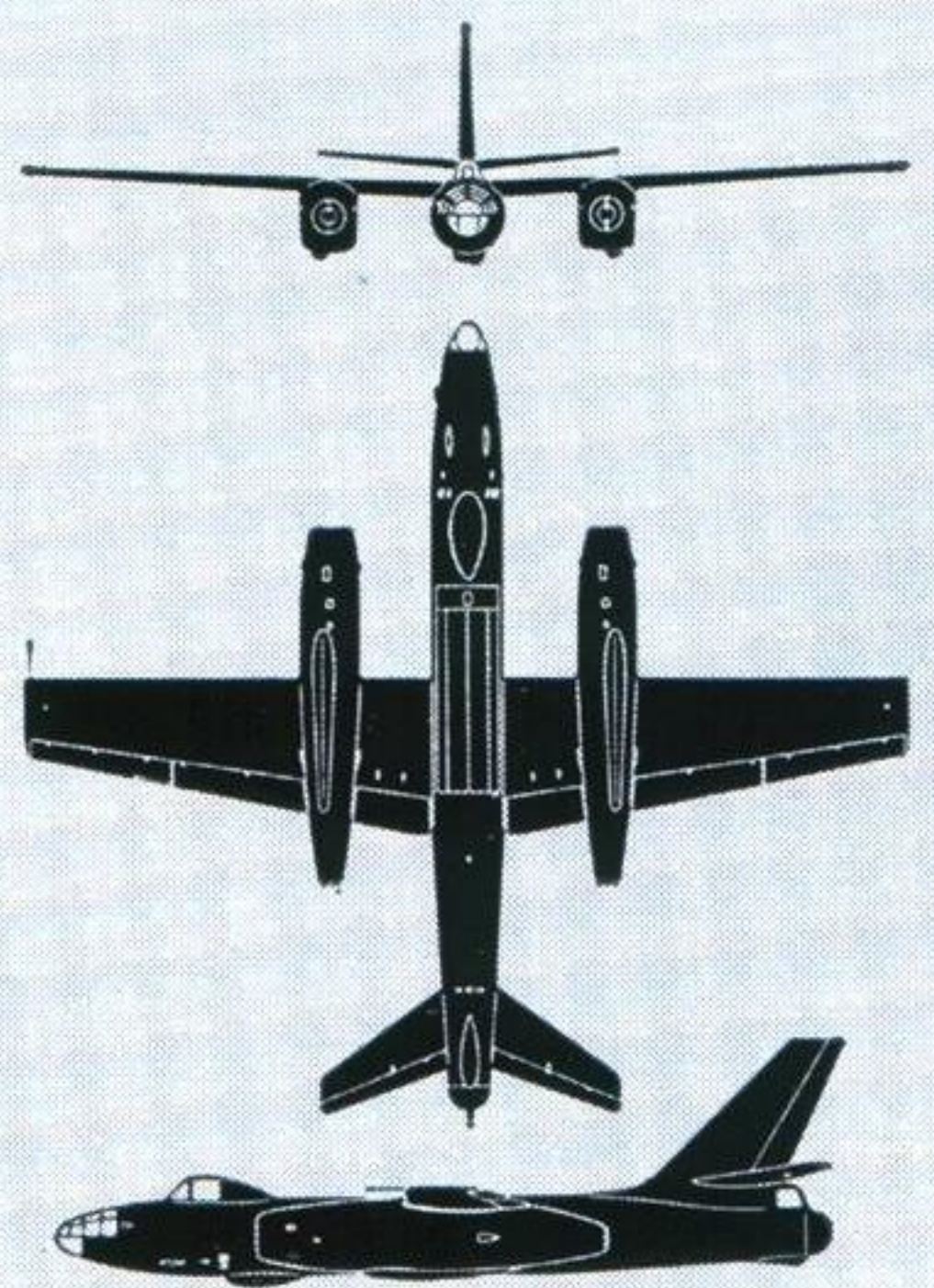
VAUTOUR French twin-jet serves in IIA single-seat fighter, IIB two-seat bomber and IIN two-seat all-weather fighter versions. Main differences in nose shape and canopy and minor differences in tail. Span 50 feet



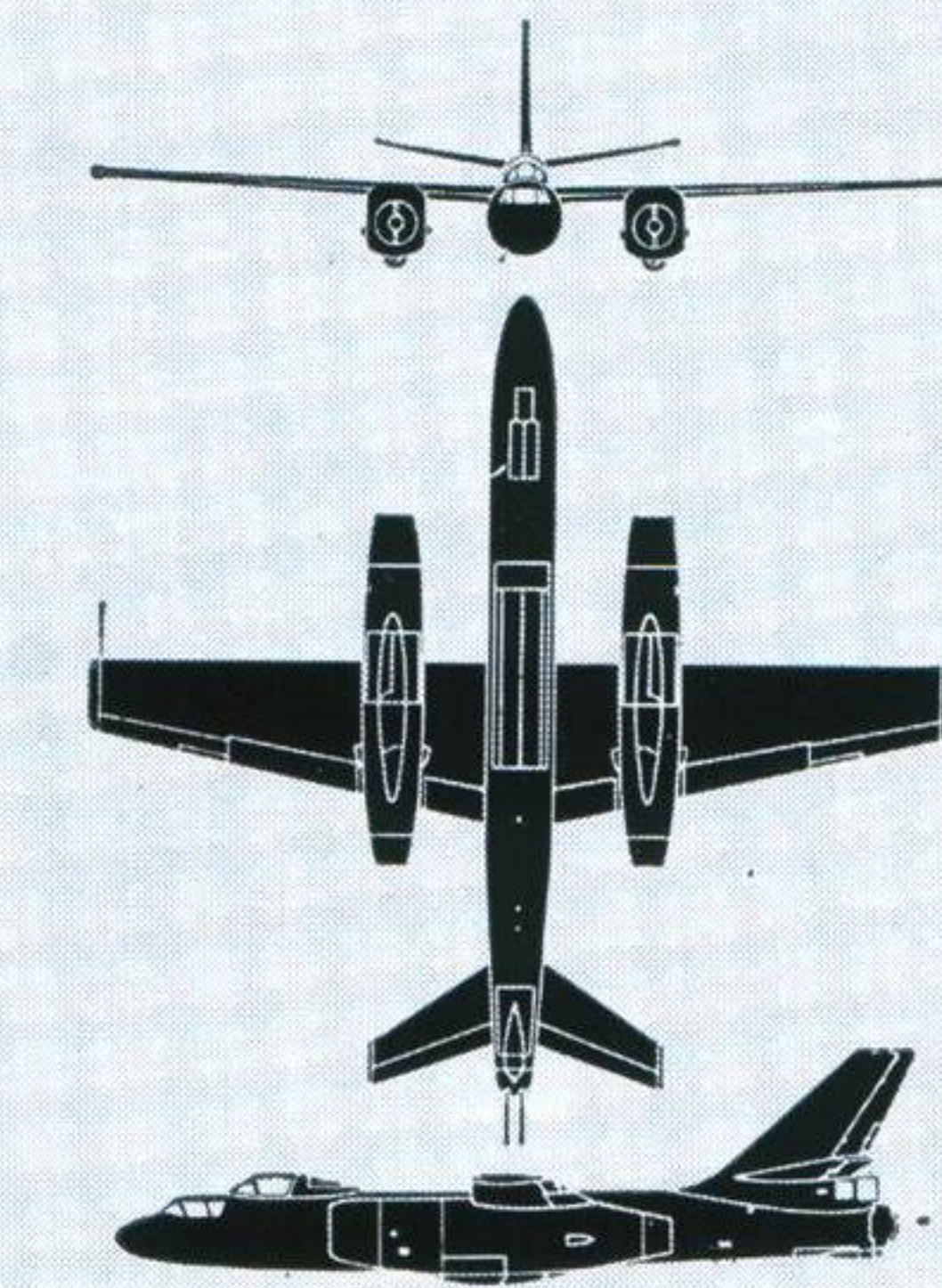
FLASHLIGHT A Russian mid-wing all-weather fighter produced in several versions including a trainer modification named Mangrove. Span 40 feet



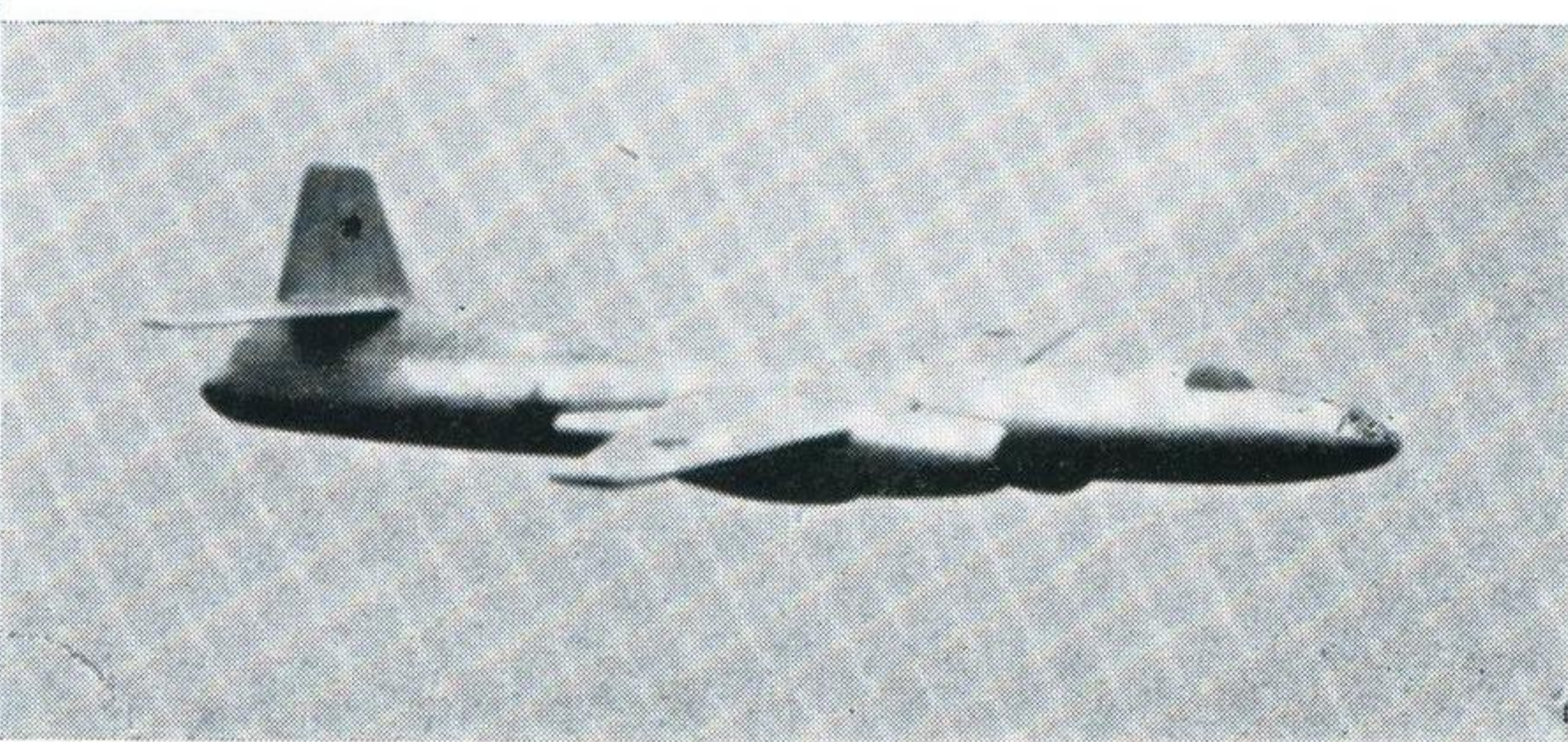
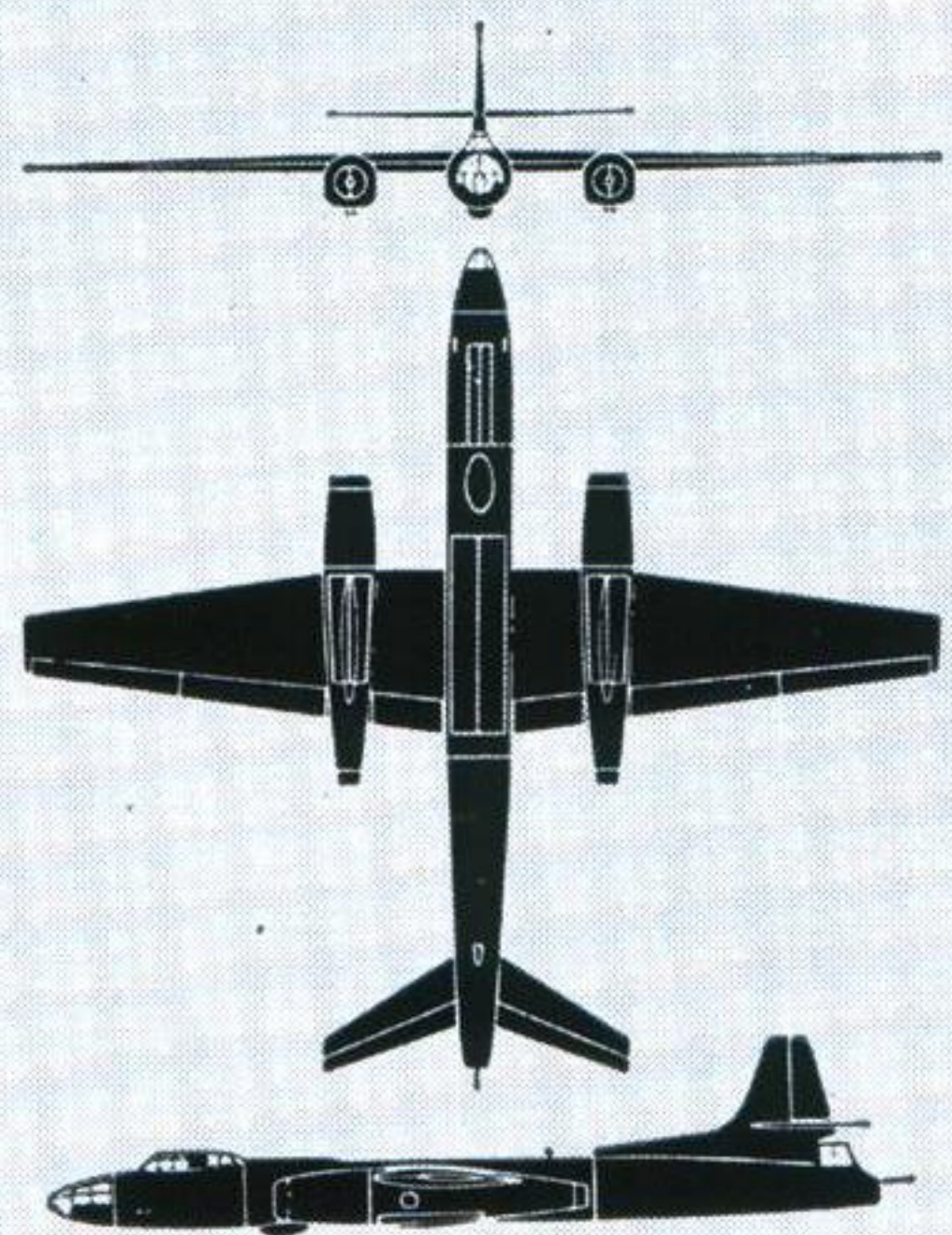
FIREBAR AND BREWER Russian shoulder-wing all-weather fighter (silhouette) and bomber (photo) named Firebar and Brewer respectively. A version in another role has the name Maestro. Span 39 feet



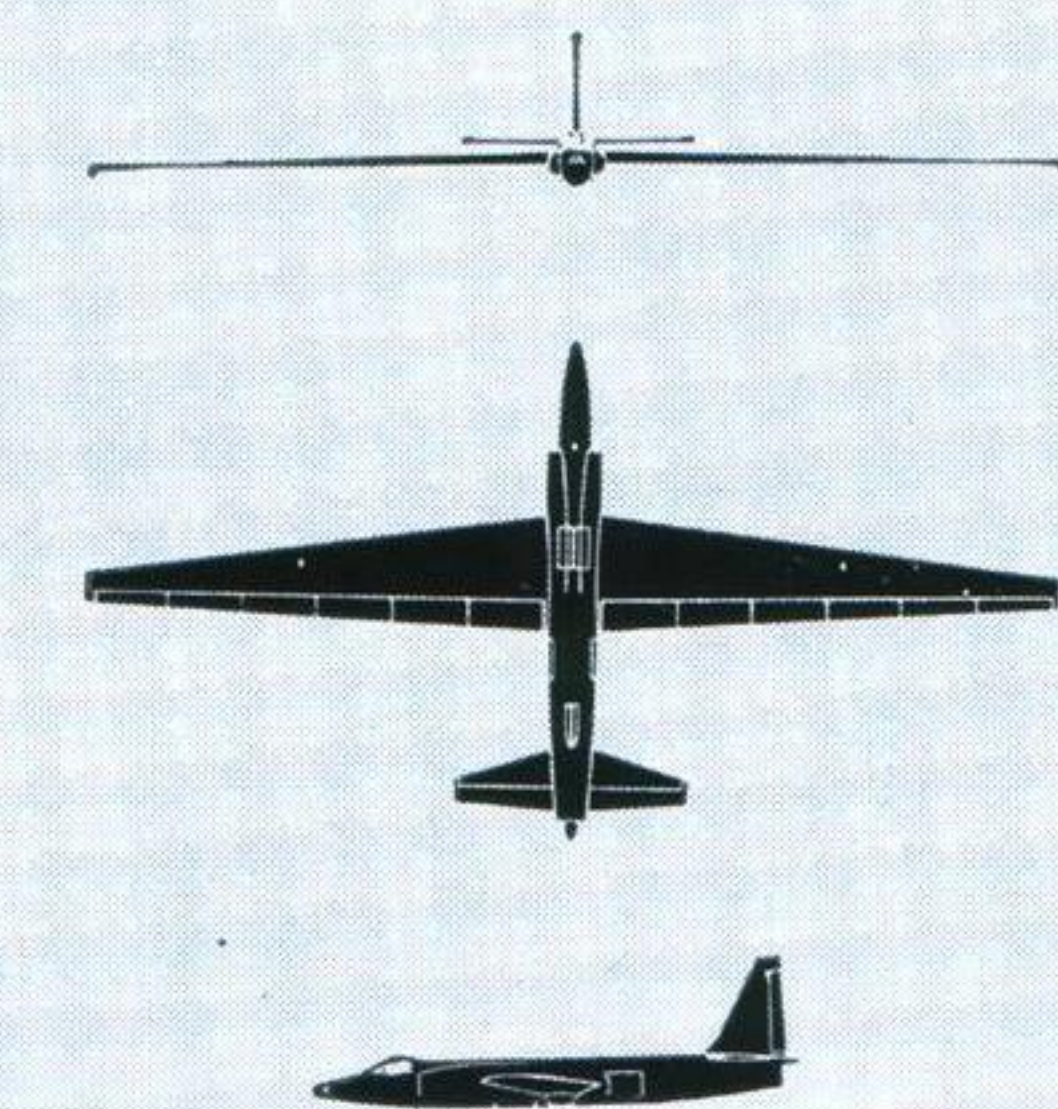
BEAGLE Large-scale production Russian light, tactical, jet bomber used also by Communist Bloc countries and in Indonesia, as the Il-28. Span 64 feet



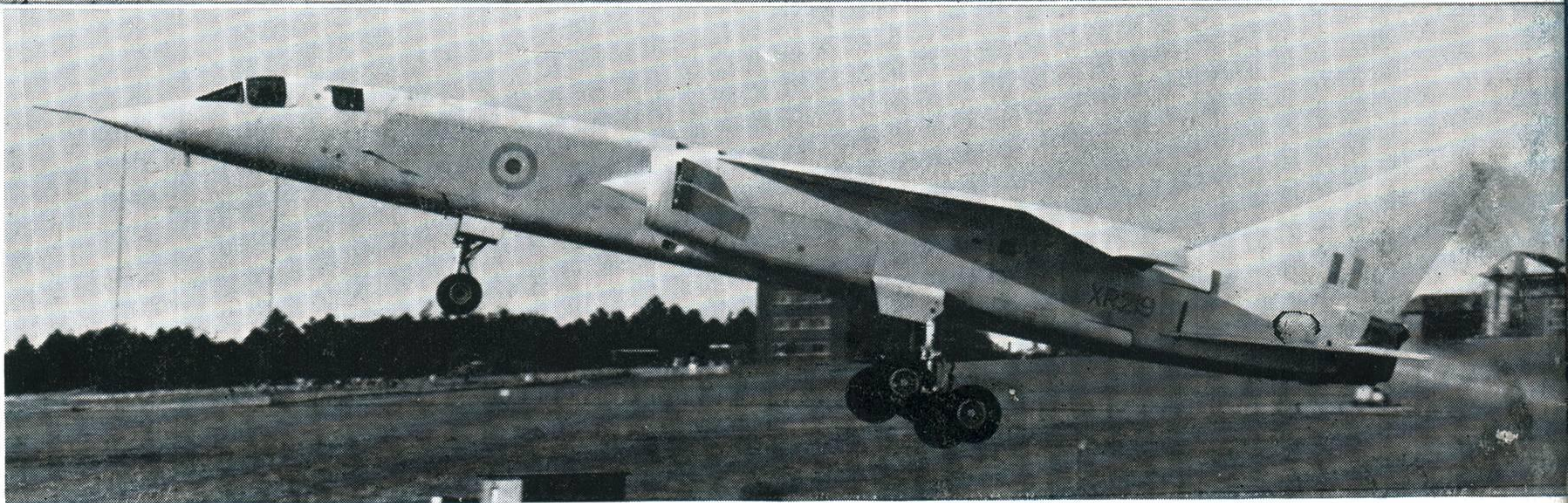
MASCOT Trainer version of the Beagle with revised nose section designated Il-28U. In service in Communist Bloc countries using the Beagle. Span 64 feet



BOSUN Light Russian bomber for naval use. Believed in limited use only. Span 83 feet



LOCKHEED U-2 Reconnaissance aircraft of unorthodox design, produced in several versions to the same basic configuration. Span 80 feet



The latest in British military and civil aircraft, the TSR-2 (right) and Super VC10 (above) both built by the British Aircraft Corporation



Two new rear-jets, the American Lear Jet (left) and the German HFB320 Hansa (below)



Two Cessna types given new roles by the U.S.A.F., the Type 172 as the new T-41A trainer (right) and the T-37 as the YAT-37D in a COIN role (above)



Executive aircraft in the 6-8 seat class, the Cessna Skyknight (above) and the Beechcraft King Air (left)