

INSTRUCTIONS FOR ASSEMBLING

F102 DART

BEFORE ASSEMBLING CONVAIR F-102 "DART," CAREFULLY STUDY SKETCH AND PLACE ALL PARTS ON WORK TABLE AS INDICATED.

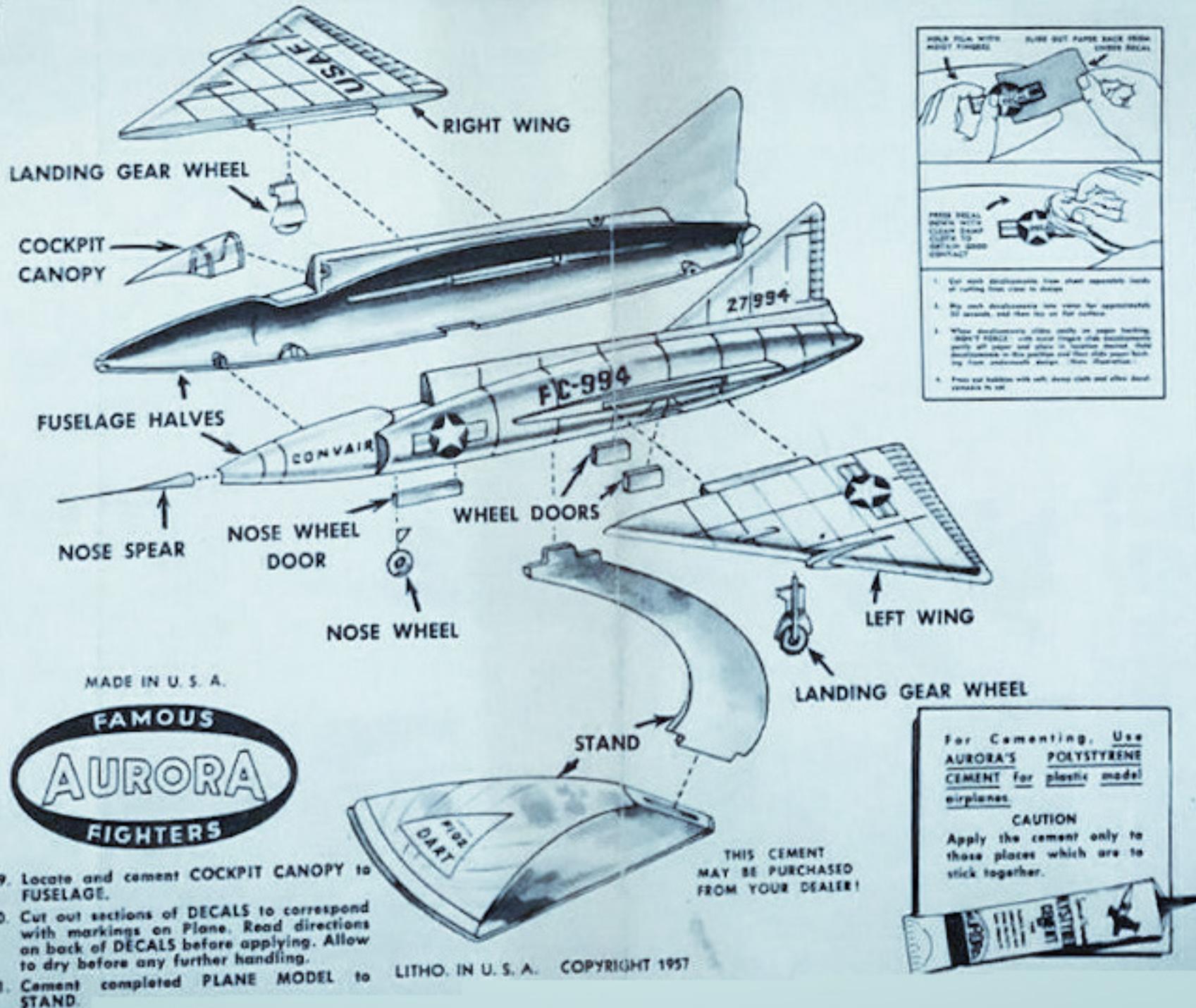
IMPORTANT—APPLY CEMENT TO INSIDE SURFACES ONLY. AVOID GETTING CEMENT ON OUTER SURFACES OF CARRIER SECTIONS. USE CEMENT VERY SPARINGLY AND AVOID GETTING CEMENT ON HANDS, SO AS NOT TO MAR OR SMEAR PLASTIC SURFACES.

DO NOT HURRY. WORK CAREFULLY AND PATIENTLY.

IMPORTANT NOTE: BEFORE PROCEEDING TO CEMENT PARTS TOGETHER, IT IS ADVISABLE TO FIT PARTS TOGETHER (BY WITHOUT CEMENT) SO THAT YOU MAY FAMILIARIZE YOURSELF WITH THE PARTS AND HOW THEY GO TOGETHER, ALSO NOTING THE POINTS WHERE CEMENT IS TO BE APPLIED.

FOR BEST RESULTS ASSEMBLE MODEL EXACTLY IN THE ORDER INDICATED.

- Cement both parts of STAND together and set aside to dry.
- Cement FUSELAGE HALVES together by applying cement sparingly along inside edges.
- Locate and cement LEFT and RIGHT WINGS to FUSELAGE.
- Locate and cement LEFT and RIGHT LANDING GEAR WHEELS to underside of WINGS.
- Locate and cement NOSE WHEEL to underside of FUSELAGE.
- Locate and cement LEFT and RIGHT WHEEL DOORS to corresponding recessed slots on underside of FUSELAGE.
- Repeat same procedure for cementing NOSE WHEEL DOOR to underside of FUSELAGE.
- Locate and cement NOSE SPEAR to NOSE of FUSELAGE.
- Locate and cement COCKPIT CANOPY to FUSELAGE.
- Cut out sections of DECALS to correspond with markings on Plane. Read directions on back of DECALS before applying. Allow to dry before any further handling.
- Cement completed PLANE MODEL to STAND.



HISTORY OF THE CONVAIR F-102 "DART"

The F-102 is a supersonic, all-weather interceptor, designed for operation in the stratosphere. Its purpose is to defend the United States against enemy attack by climbing rapidly to great altitude and knocking out enemy aircraft, in any kind of weather, day or night. The delta-wing design of the F-102 is based on flight research since 1946 with Convair's XP-92A, the first delta-wing plane ever flown.

The F-102 is fitted with an automatic electronic control system which needs only to be monitored by the pilot. The ship is also expected to carry Hughes GAR-1 guided missile which will be automatically fired. The automatic pilot and firing systems were developed by the Hughes Aircraft Company.

Two F-102 prototypes were built, both of which were powered by the Pratt and Whitney J57-P-11 engine with afterburner. The first ship made its maiden flight in October, 1953, the second made its first flight in January, 1954.

An improved model of the F-102, the F-102A was airborne for the first time on December 20, 1954, and on the following day exceeded the speed of sound in level flight. Application of the "Area Rule" gave the F-102A an hour glass shape, enabling it to attain even higher performance into the supersonic speed range.

The production model F-102A is longer than the original ship. The delta wing remains the same except that it has cambered leading edges and swept-on wing tips. The ship is of good size with a span of 38 feet 2 inches, 68 feet 3 inches and a height of 18 feet 2 inches. Elevators and ailerons are combined in single control surfaces known as "elevons" on the trailing edge of the wings.