



HAWK MODEL CO.
620 BUCKBEE STREET
ROCKFORD, ILLINOIS 61101

instruction manual

LOCKHEED U-2

KIT No. 209

COPYRIGHT - HAWK - 1962

MADE AND PRINTED IN THE U.S.A.



The Lockheed U-2 spans 80 feet and has a length of 49 feet, 7 inches. Gross takeoff weight is upward of 17,600 pounds. The U-2 has been powered by both the Pratt & Whitney J-57 and the P & W J-75. The U-2 is capable of flying at an altitude over 80,000 feet. Cruise airspeed, at altitude, is about 460 miles per hour, true. Limiting Mach number on the "Shady Lady" is .75 - .80. The U-2 has a range, with slipper fuel tanks, of over 3,800 miles and a flight duration of over eight hours.

Flight efficiency of the U-2 is very high. Aero-dynamically, the U-2 can be described as having a "cantilever high aspect ratio wing mounted mid-way up on a high fineness ratio fuselage of basically circular cross-section." Downward bent wingtip end plates act to further increase the effective aspect ratio of the wing.

Structural weight of the U-2 is kept very low. The wings flex noticeably and low altitude airspeed is limited to approximately 175 - 200 miles per hour so as not to overload the structure in the event that turbulent air is encountered, thereby preventing inflight structural failure.

Because the U-2 may range over territory lacking in good navigational aids, it carries devices other than radio gear to assist the pilot in precise tracking. One device, an Astro Compass, is mounted in an optical dome forward of the cockpit. This unit takes automatic "fixes" on celestial bodies. Another device, an inertial guidance system, has been incorporated into a number of U-2 aircraft. A third device, a downward looking optical periscope, enable the pilot to view, with magnification, the earth directly below him and is useful for visual navigation and inspection of terrain features.

A U-2 pilot will normally spend the day prior to a mission in preflight planning. This will generally consist of an overall briefing and computation of fuel requirements, navigation, and will include weather analysis. One and one-half hours prior to flight, the pilot meets with a Flight Surgeon for a medical check. A high protein meal of steak, eggs, toast, juice and coffee is generally provided before each long mission. The pilot begins dressing 45 minutes before takeoff. Long underwear worn seams out, is worn beneath the partial pressure suit for comfort. An MC-3A partial pressure suit, MA-2 helmet, inflatable gloves, non-pressurized boots and outer coveralls are items worn. As soon as a pilot is finished dressing, he begins pre-breathing oxygen from a walk around bottle in order to stabilize the oxygen level of his blood stream.

The U-2 is a multi-mission aircraft and has been used for upper air sampling of radioactive dust, aerial photography, monitoring radio and radar signals, and weather research. Equipment for these missions is carried in the nose of the airplane and also in a compartment located in the belly of the aircraft immediately forward of the main landing gear well.

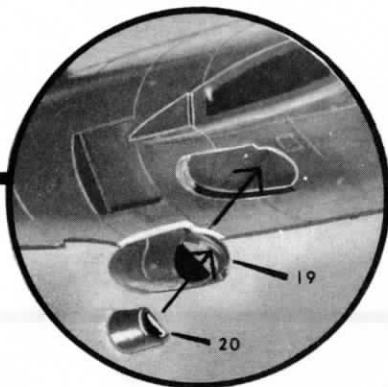
The U-2 is basically an unsophisticated design from a mechanical standpoint, however, this factor has enabled the aircraft to have a record of high availability and dependability that is in keeping with its high performance. As a result the U-2 is an excellent example of functional design.



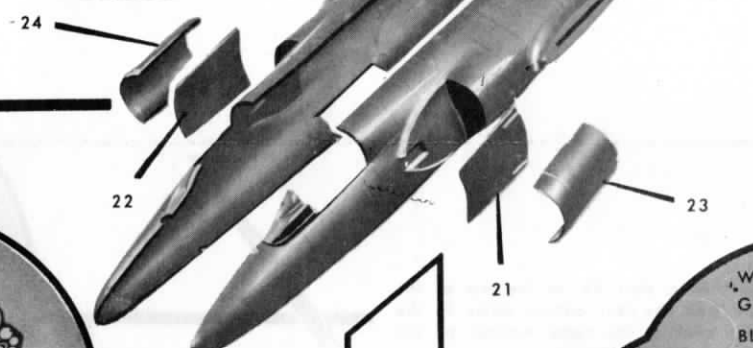
USE POLYSTYRENE CEMENT ONLY

HAWK MODEL CO.
620 BUCKBEE STREET
ROCKFORD, ILLINOIS 61101

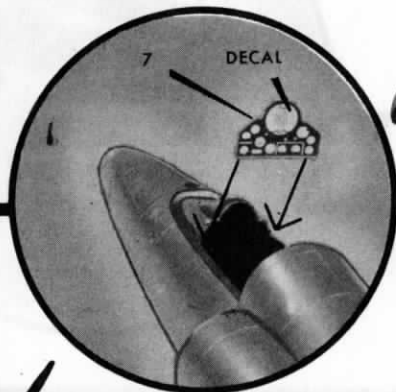
Step 1. Cement the auxiliary scoop forward section, part 20, to the scoop aft section, part 19, as shown. Now cement the scoop unit to right fuselage half, part 1, as shown. See large photo in Step 5 for correct finished appearance.



Step 2. Cement the fuselage halves, parts 1 and 2 together. Cement inner scoop walls, parts 21 and 22 to the fuselage as shown. Now cement the outer scoop walls, parts 23 and 24, in place. Complete Step 2 by cementing the stabilizer parts, 3 and 4, to the fuselage.



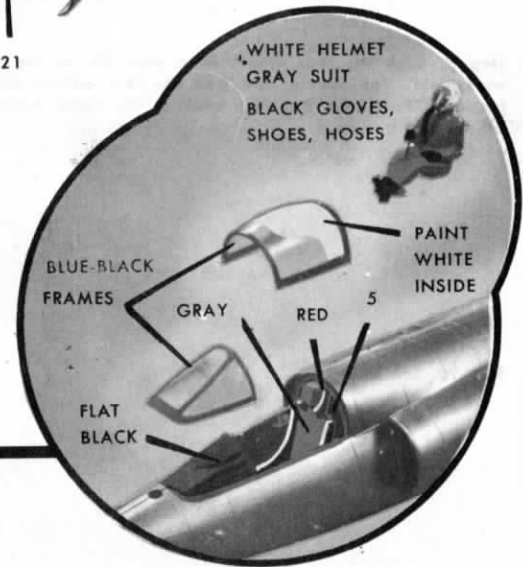
Step 3. Apply the decal instrument panel to the plastic panel, part 7. Now cement the instrument panel into place.



Step 4. Paint the seat, part 5, gray. Paint the headrest portion of the seat red as shown. When dry mount the seat into the fuselage with the pins on the seat fitting into the "U" shaped brackets in the fuselage sides. Paint the pilot and cement him to seat. Paint the inside of the canopy white and glue the canopy and windshield into place. Now paint the windshield and canopy frames.

PAINTING STEP
WHITE, GRAY, RED,
FLAT BLACK, BLUE-BLACK

**Use enamel, not
lacquer, for painting**



Read the instructions
assembled

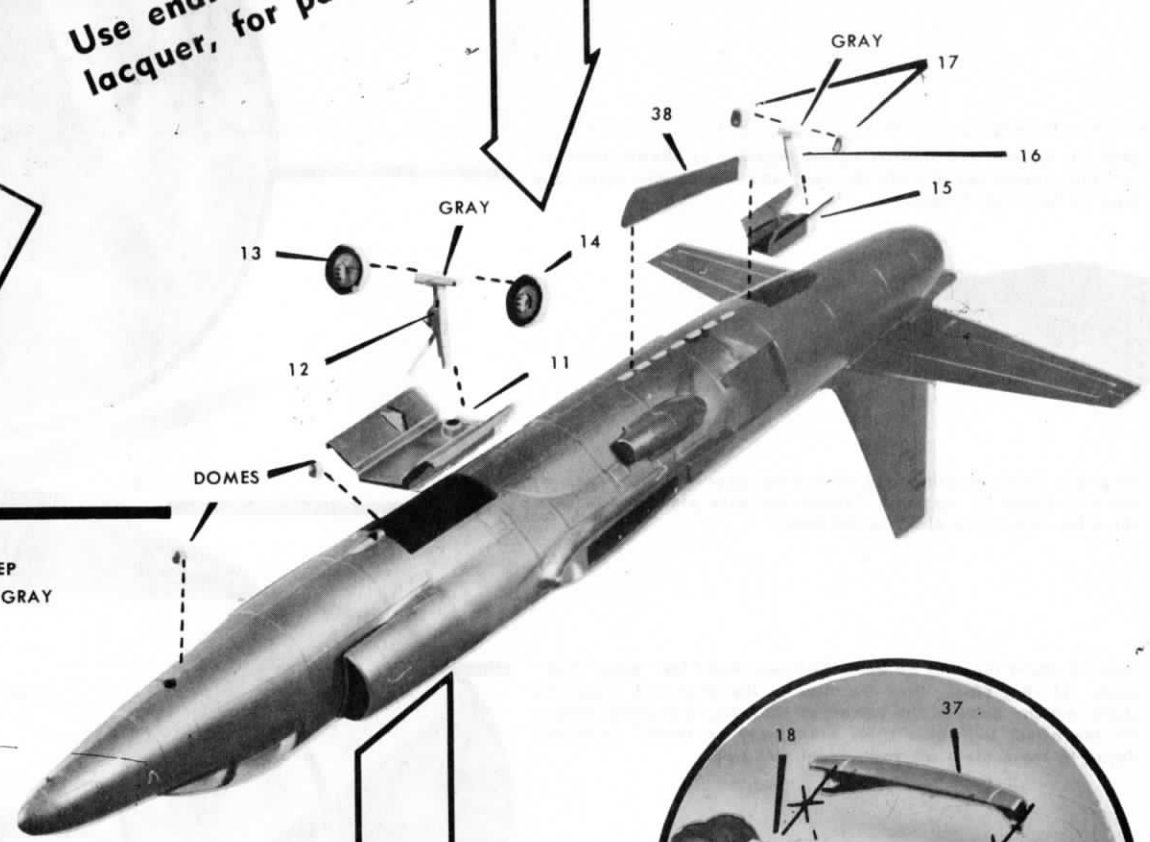
GRAY
17

WARNING
 Read the instruction sheet BEFORE beginning assembly. Learn where each part goes and the sequence of assembly. Work slowly and carefully to insure the construction of a perfect model.

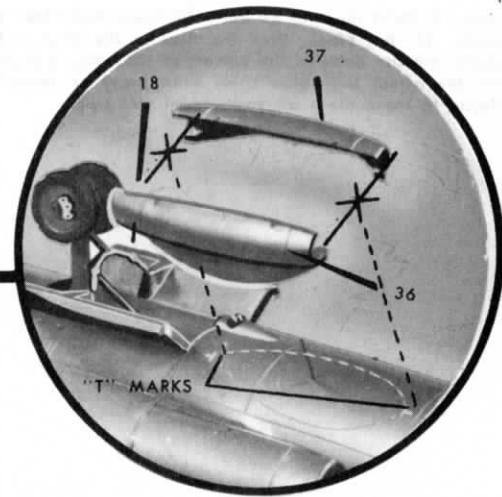
Use enamel
 lacquer, for painting

Step 5. Paint the tires of parts 17, 13 and 14, flat black. Glue 13 and 14 to the forward strut, part 12. Be sure the pins on the wheels insert into the holes on each side of the strut and that the brake disc housings face forward. Glue the strut into the gear door housing, part 17. Now cement the entire unit into the fuselage. Follow the same method with the aft gear, parts 15, 16 and 17. Now cement the optical domes, clear parts, into their respective holes as shown. The ventral antenna, part 38, can now be cemented in place. Not all U-2 aircraft have this antenna so if you choose you may leave it off.

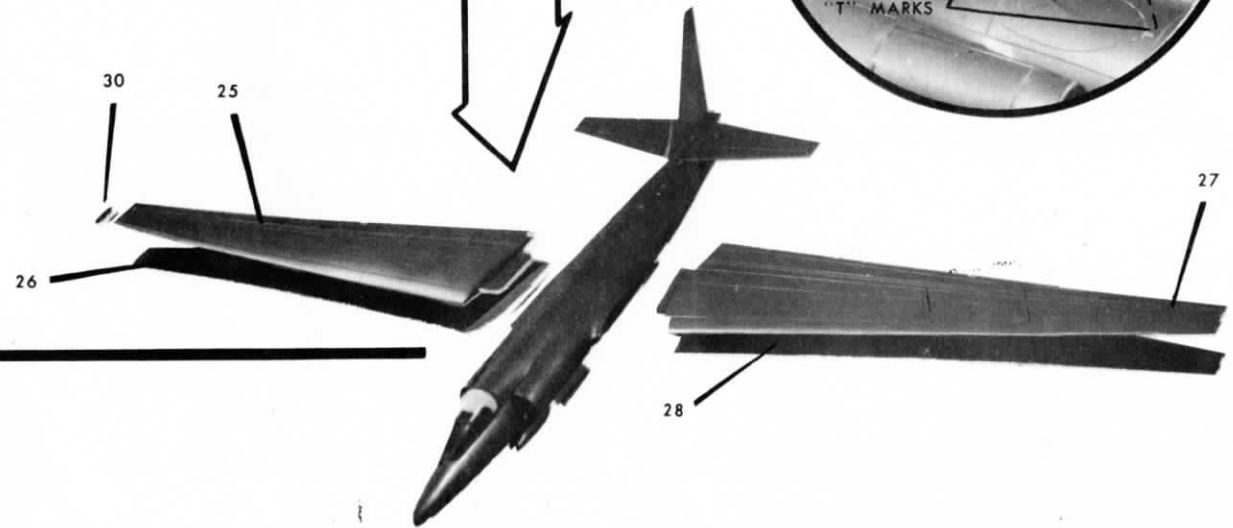
PAINTING STEP
 FLAT BLACK, GRAY



Step 6. Cement the gear door linkage, part 18, into place as shown: Cement the sniffer halves, parts 36 & 37, together and mount the sniffer to the fuselage centering it between the "T" marks engraved on the fuselage. Again, as with the ventral antennae, not all U-2 airplanes carry the sniffer so it may be left off.



Step 7. Cement upper right wing, 25, to lower right wing, 26. Now cement the right end plate, 30, to the right wing. Assemble the left wing parts, 27, 28 and 29, in the same manner. Now glue the wings into the fuselage slots.



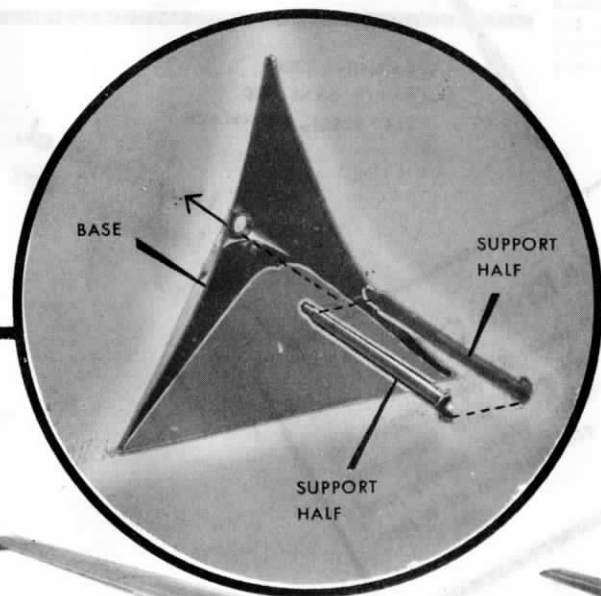
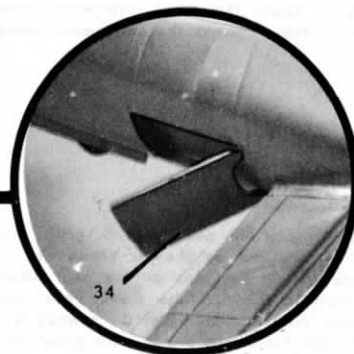
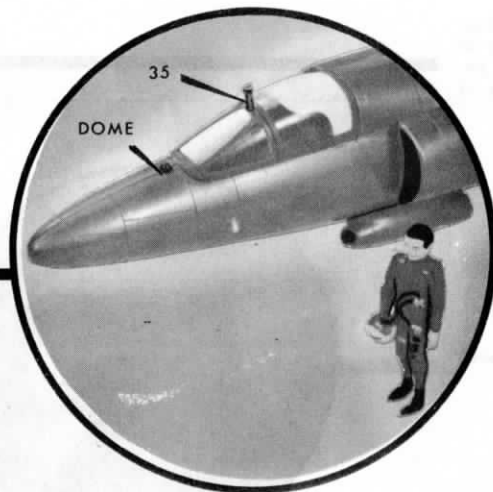
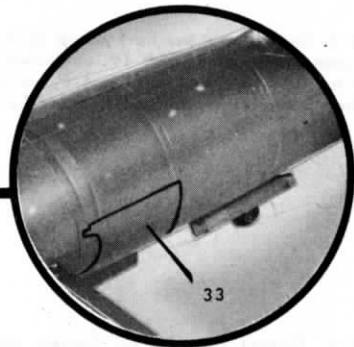
Step 8. Assemble the dive brakes, parts 33 and 34, to the model in an open or closed position. See Step 10. Note that part 33 attaches to the left side of the airplane.

Step 9. Glue the rear view mirror, part 35, to the top of the windshield. You should now add the last optical dome to the fuselage. Paint the standing pilot in the same manner as the sitting pilot in Step 4.

PAINTING STEP
FLAT BLACK, GRAY
FLESH, WHITE

Step 10. See Step 8.

Step 11. Cement the support halves together as shown. Now insert the support rod through the base and cement into place. See Step 12 for finished base.



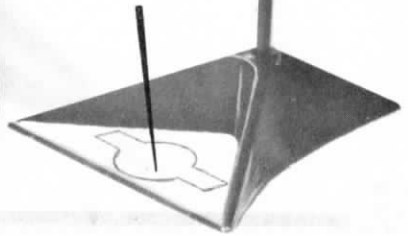
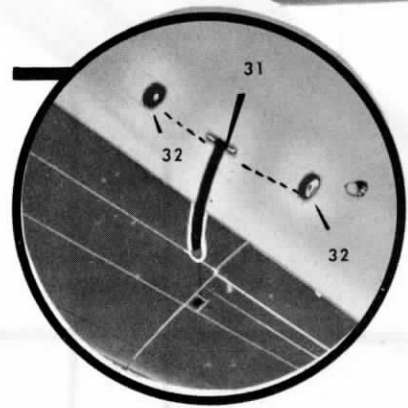
Step 11. Cement the support halves together as shown. Now insert the support rod through the base and cement into place. See Step 12 for finished base.



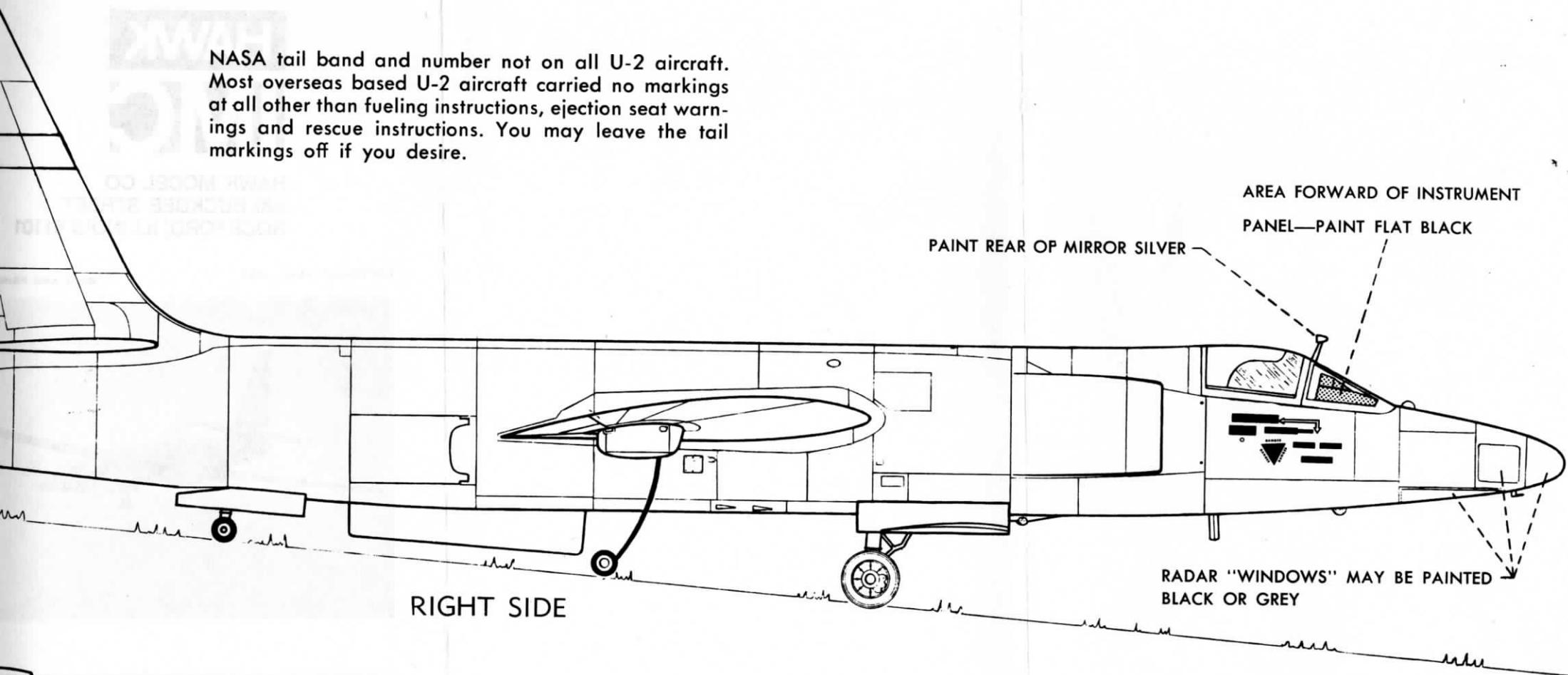
Step 12. Finish painting and decorating your U-2. Now cement the U-2 model to the base. Cement the base placard (cut from the other side of the plan) to the base.

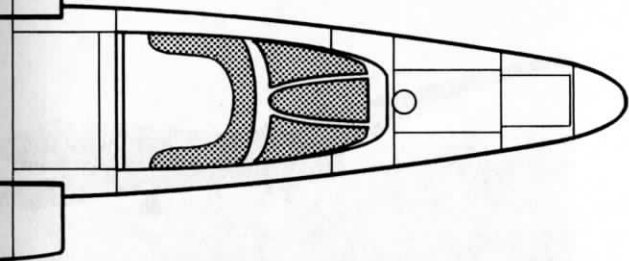


Step 13. Paint the tires on parts 32 black. Paint the "pogo stick" struts, 31, flat black. Glue the tires to the strut and insert the struts into the holes in the bottom of the wing. See photo above. On the actual U-2 these struts drop away on takeoff so if you desire to leave these off your model you may.



NASA tail band and number not on all U-2 aircraft. Most overseas based U-2 aircraft carried no markings at all other than fueling instructions, ejection seat warnings and rescue instructions. You may leave the tail markings off if you desire.



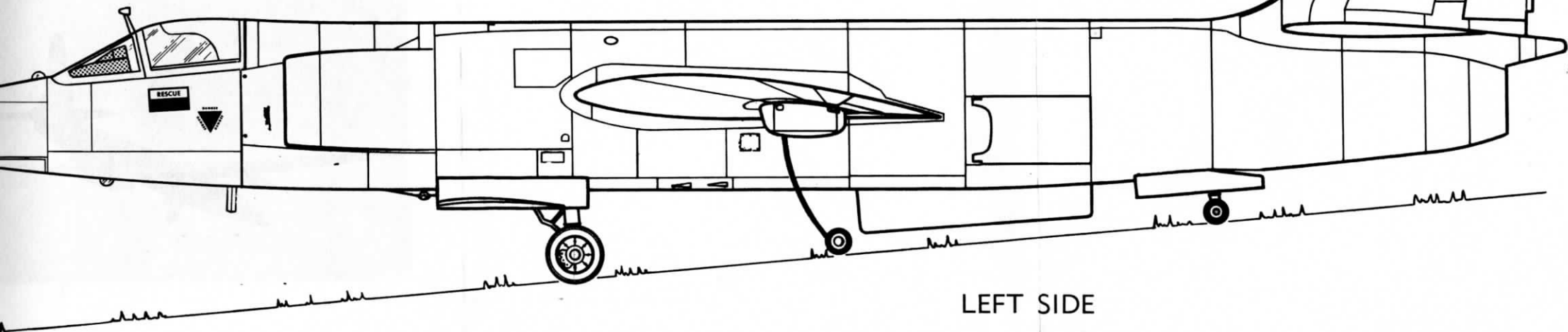


TOP

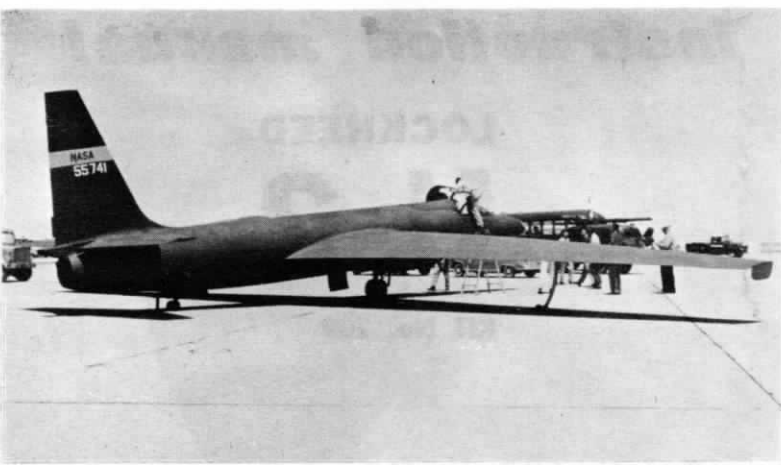
The U-2, as flown on missions that brought it fame, was painted a dull blue-black color with no national markings. Sometimes these aircraft carried a very small 3 digit number on the fin. Example: 449—carried on U-2 that made an emergency belly landing at Fujisawa airport in Japan on the 24th of September, 1959.

Considerable detail variations occur between U-2 aircraft, most conspicuous being enlarged air scoops on some late machines. The U-2 modeled in this Hawk kit is an early U-2 and does not have the enlarged intakes.

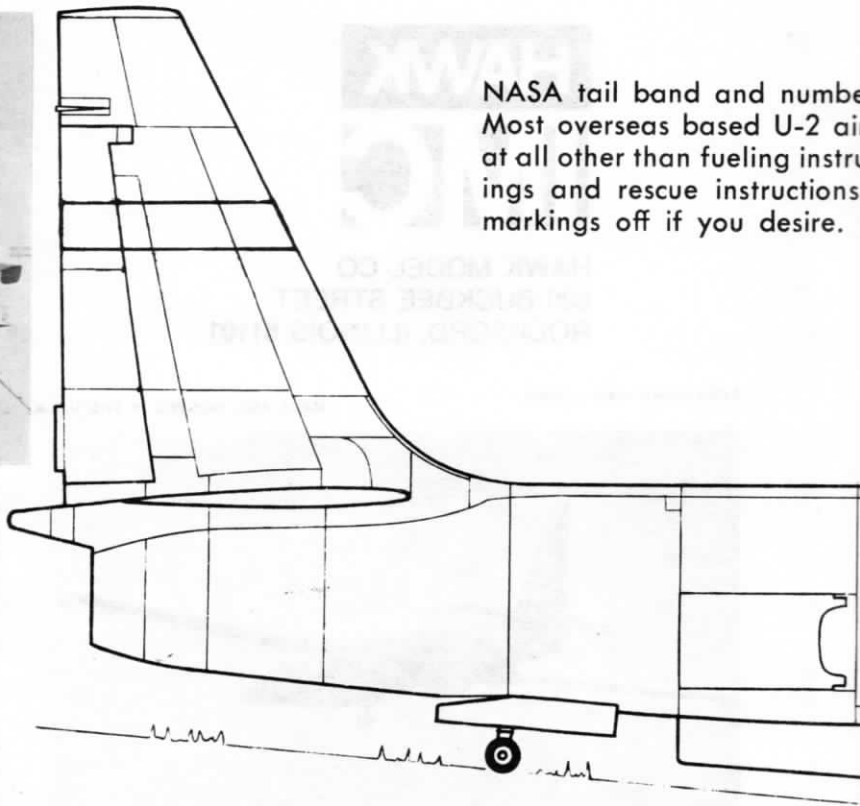
For maximum realism we recommend painting the model flat blue-black. Landing gear struts and wheel hubs silver. All tires flat black.



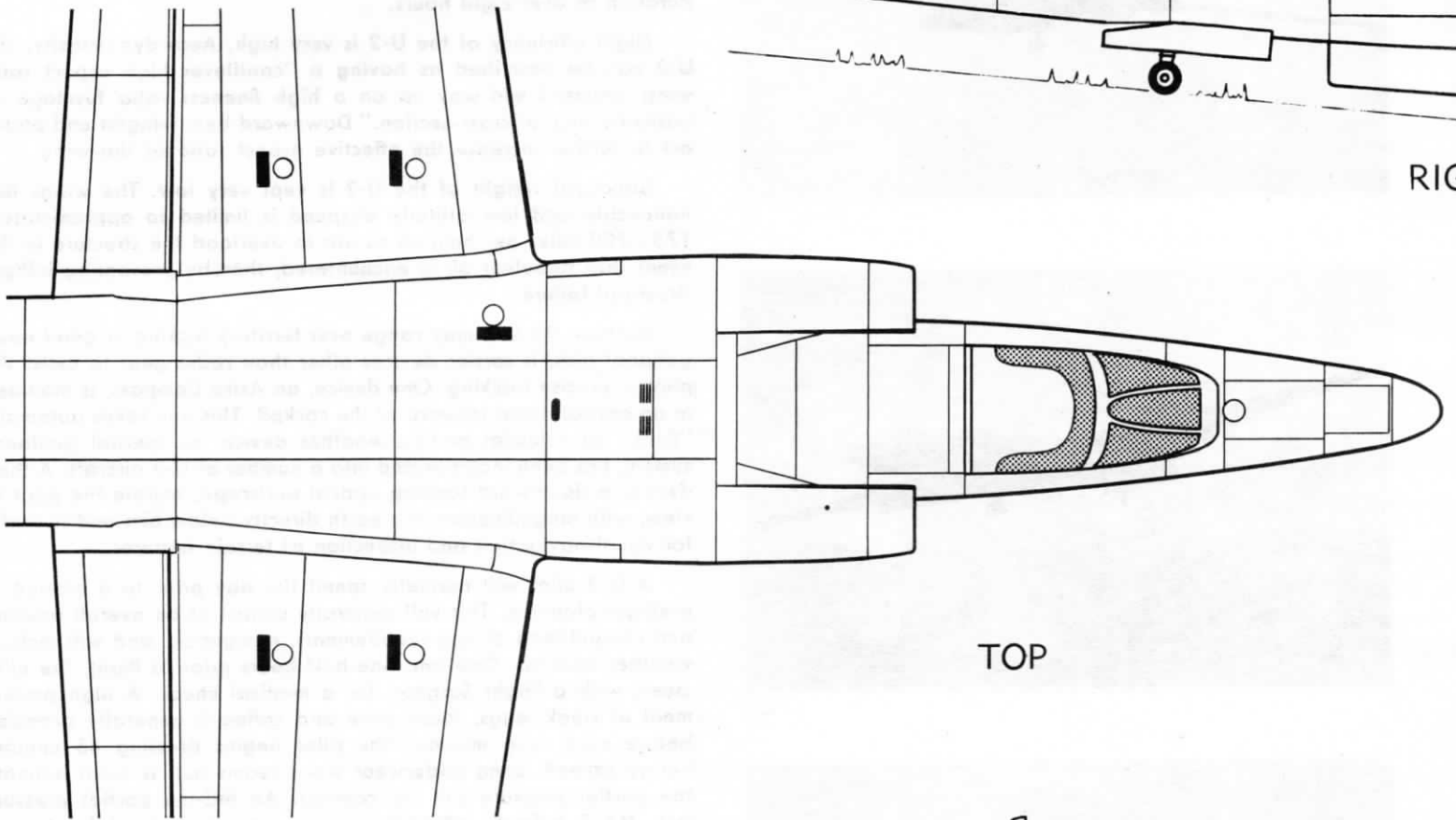
LEFT SIDE



HOWARD LEVY Photo



RIGHT

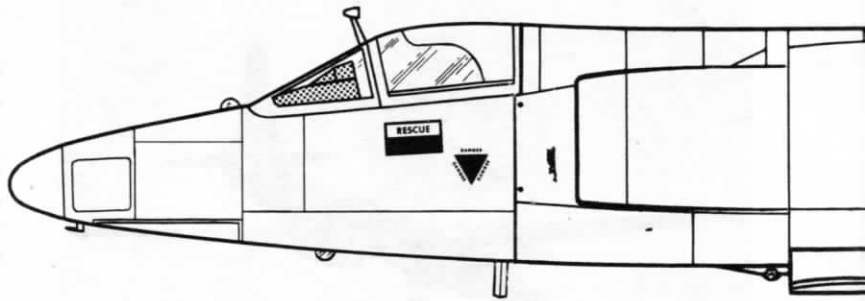


TOP

NASA tail band and number
 Most overseas based U-2 aircraft
 at all other than fueling instructions
 and rescue instructions
 markings off if you desire.



CUT THIS PLACARD FROM PLAN AND
 GLUE TO BASE



NASA

NASA

55741

55741

RESCUE



RESCUE



RESCUE



RESCUE

RESCUE

RESCUE



94583

- INSTRUCTIONS -

1. CUT SHEET INTO INDIVIDUAL DECALS WITH SCISSORS.
2. ONE AT A TIME AS NEEDED, DIP EACH DECAL IN WARM WATER FOR 10 SECONDS.
3. REMOVE & WAIT 40 SECONDS FOR DECAL TO RELEASE FROM PAPER.
4. SLIDE DECAL OFF BACKING PAPER INTO POSITION ON MODEL
(REFER TO PLAN FOR CORRECT LOCATION)
5. WITH MOISTENED FINGER, PRESS DOWN & SMOOTH OUT AIR BUBBLES AND EXCESS WATER.
6. ALLOW TO DRY OVERNITE.

NOTE: THESE DECALS HAVE BEEN ESPECIALLY DESIGNED TO BE FLEXIBLE ENOUGH TO STRETCH OVER PROTRUSIONS & AROUND COMPOUND CURVED SURFACES.

HAWK MODEL CO.
620 BUCKBEE ST.
ROCKFORD, ILLINOIS
61101

LOCKHEED U-2
Kit No. 209

Made in U. S. A.

Chicago Decal Co. Chicago 18, Ill.