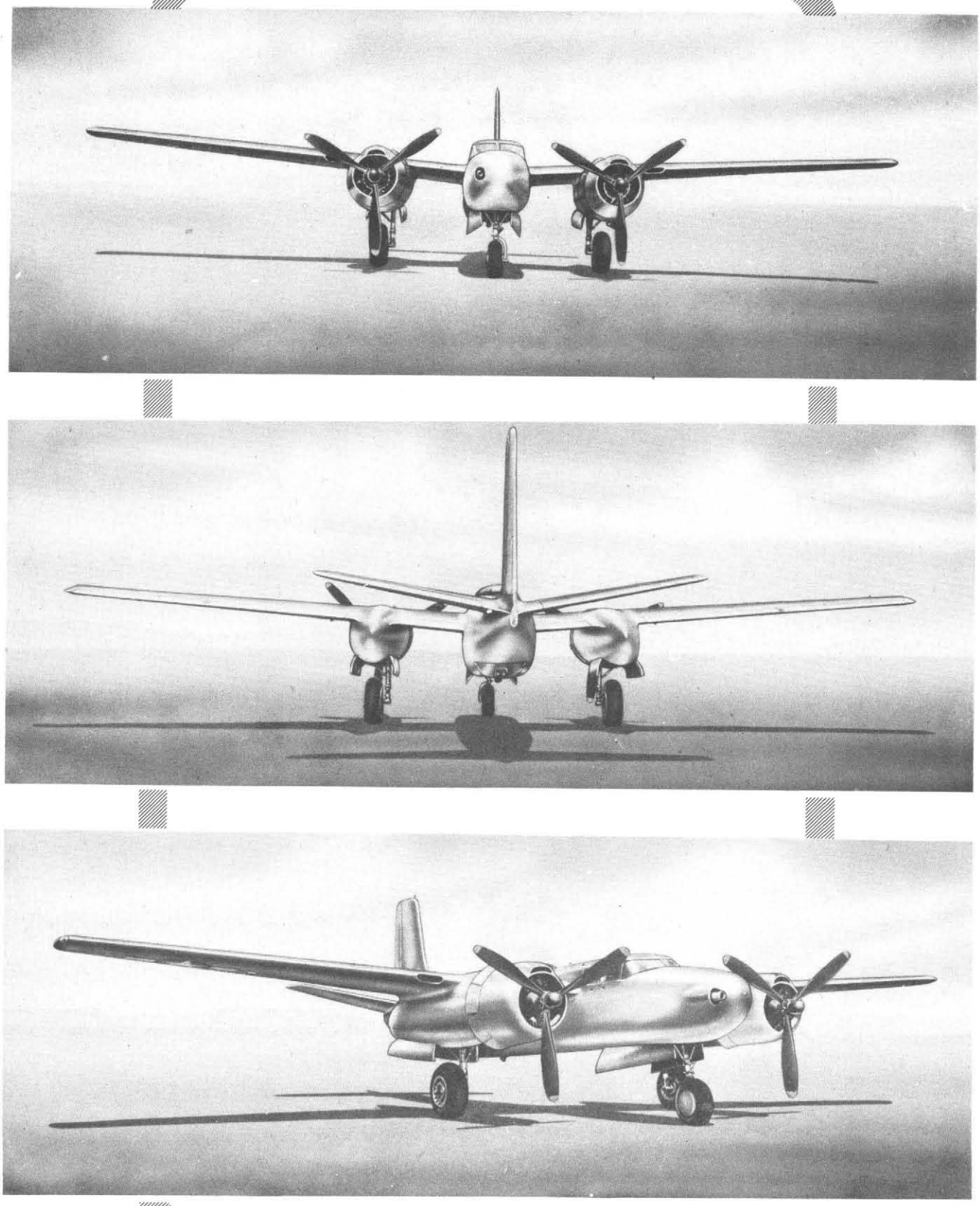


Figure 1 — Airplane Views (Sheet 1 of 2)

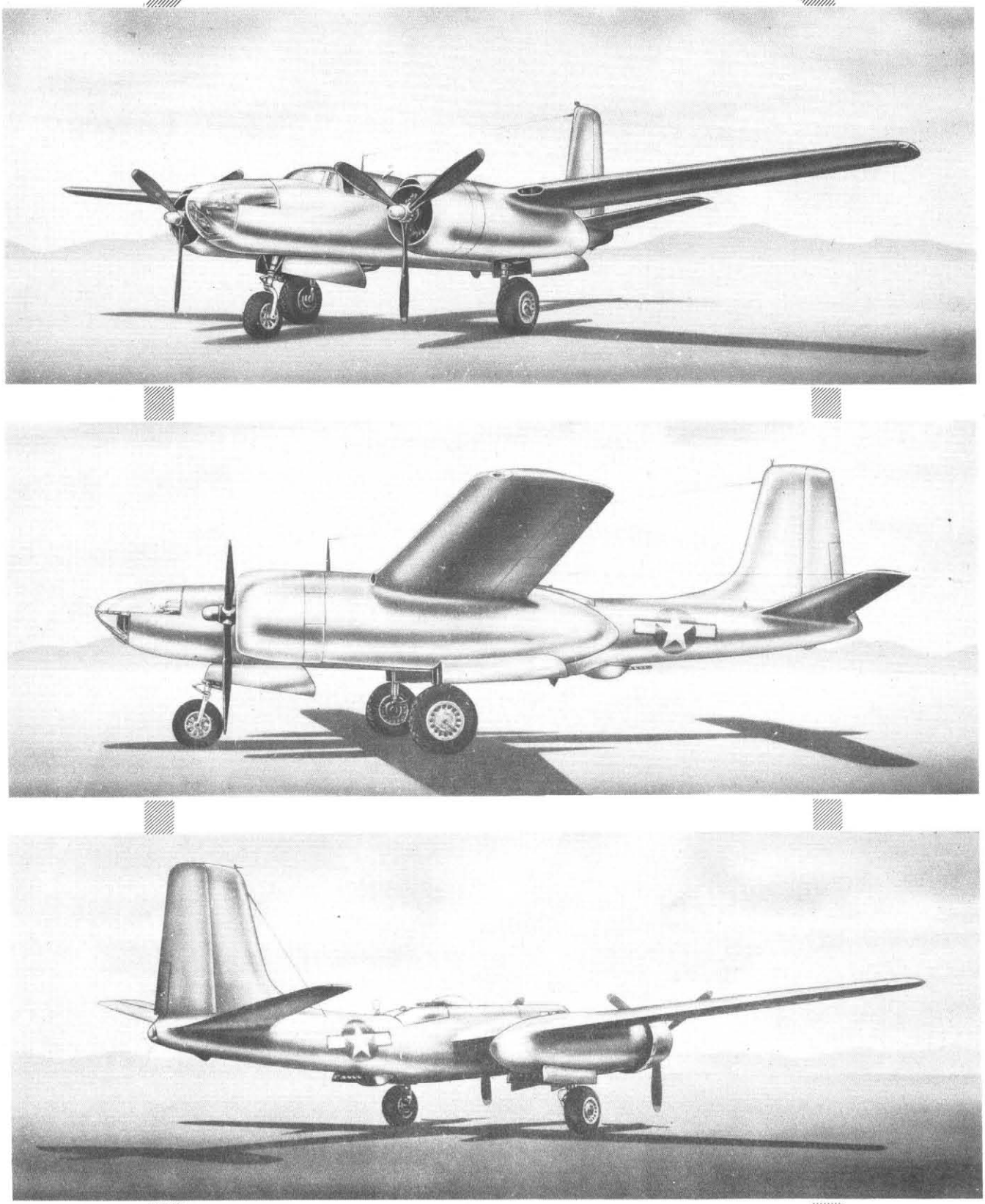


Figure 1 — Airplane Views (Sheet 2 of 2)

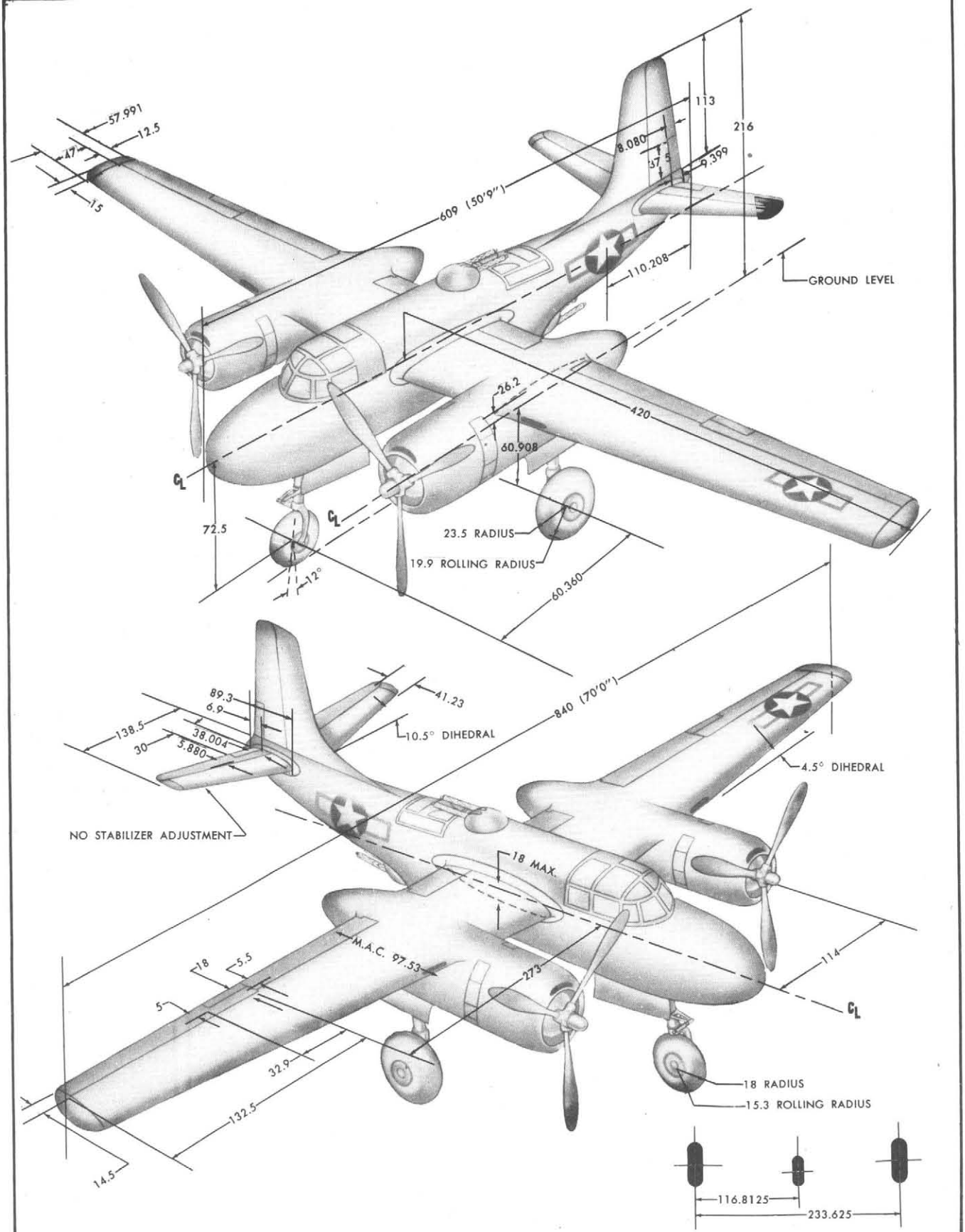


Figure 2 — Dimensions Diagram

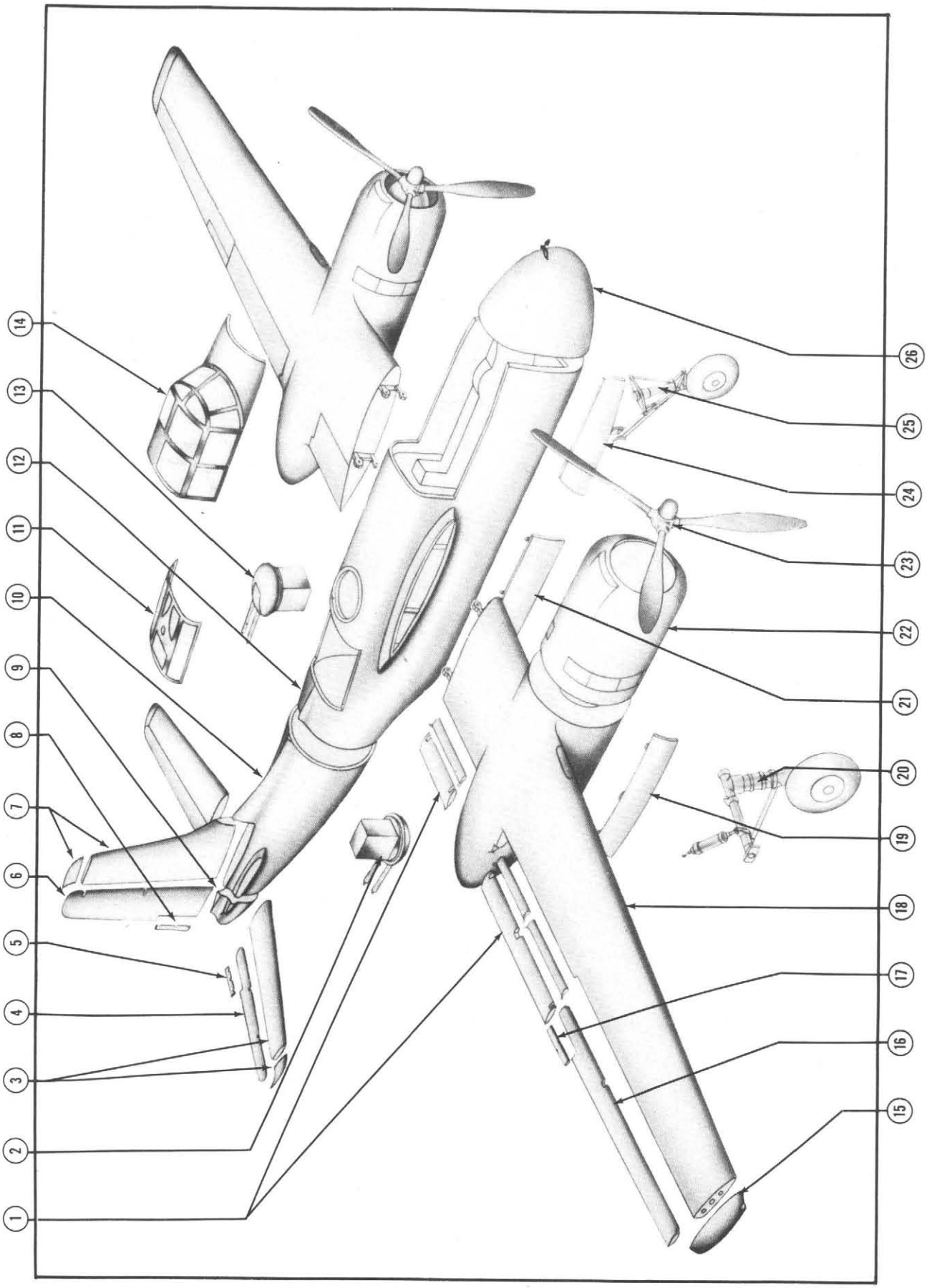
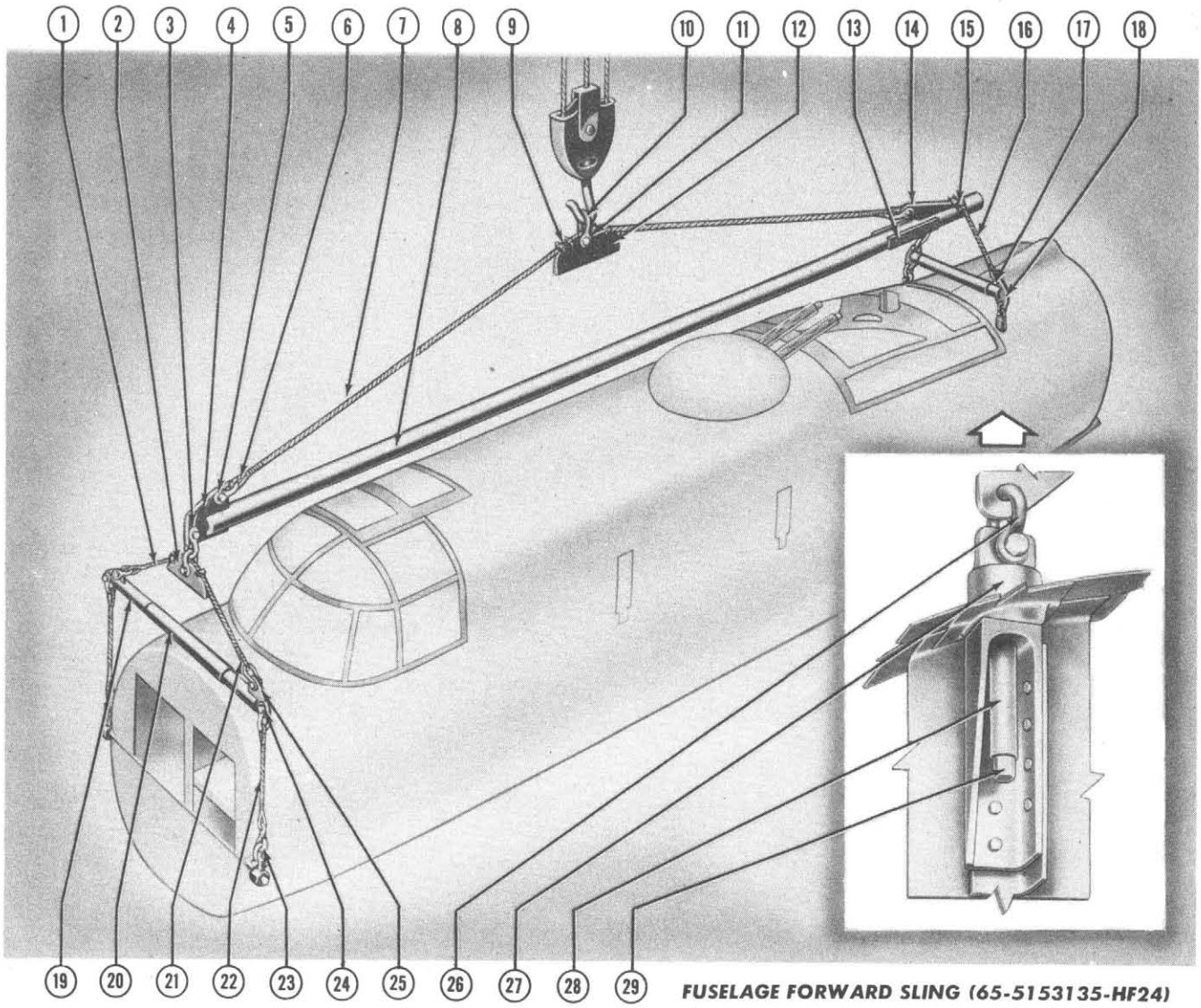


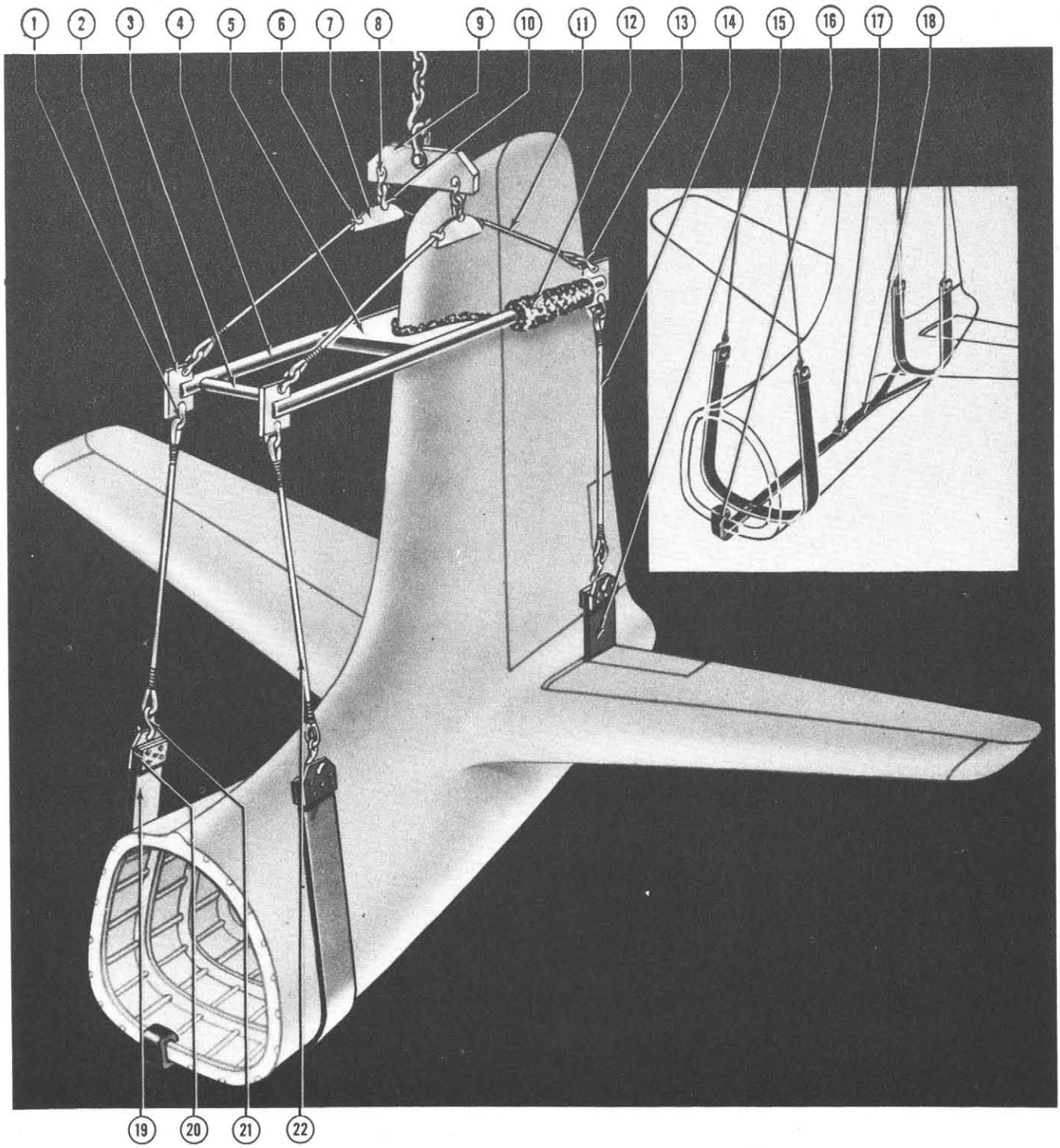
Figure 5 — Airplane Component Parts



FUSELAGE FORWARD SLING (65-5153135-HF24)

Ref. No.	Name	Size and Material	No. Req.
1.	Roebling Blue Center Wire Rope	1/2 x 126-1/2 (6 x 19)	1
2.	Eye Lift	1/2 (Cable Size)	1
	Plate	4 x 10-1/8 x 3/8 SAE 1020 CR	1
	Cable Clip (Ducommun)		2
	Anchor Shackle	3/8 x 11/16 x 7/8	1
3.	Round Pin Anchor Shackle	2-3/4 x 6-13/16 x 2-1/8	5
	Drop Forging	SAE 1025	5
	Hex. Nut	7/8-9	5
	Hex. Head Bolt	7/8-9 x 4-1/4	5
	Cotter Pin	1/16 x 1-1/4	5
4.	Plate	5/8 x 8-3/4 x 9-1/2 SAE 1020 HR	1
5.	Spacer	2 Dia. x 1/2 SAE 1020 HR	10
6.	Thimble	Cable Dia. 5/8 2-1/8 x 7/8 x 11/16 x 1-1/4 Wire Rope	2
7.	Roebling Blue Center Wire Rope	5/8 x 398 (6 x 19)	1
8.	STD. B.I. Pipe	4-1/2 Nom. x 298-7/8	1
9.	Cable Clamp (U Type)	5/8	4
10.	Round Pin Anchor Shackle	Drop Forging SAE 1025	1
	Hex. Nut	1-8	1
	Hex. Head Bolt	1-8 x 5-1/2	1
	Cotter Pin	1/16 x 1-1/4	1
11.	Spacer	2-1/2 Dia. x 3/8 SAE 1020 CR	2
12.	Plate	3/4 x 5-1/2 x 14-1/2 SAE 1020 HR	1
13.	Weights	As Req. For Balance	As Req.
14.	Plate	5/8 x 8-3/4 x 9-3/4 SAE 1020 HR c/s	1
15.	Eye Lift	3/8 Cable Size	1
	Plate	4 x 10-1/8 x 3/8	1
	Cable Clip (Ducommun)		2
	Anchor Shackle	11/16 x 3/8 x 7/8	1
16.	Roebling Blue Center Cable	5/16 Dia. x 37 Length (6 x 19)	1
17.	STD. B.I. Pipe	1-1/2 Nom. x 35	1
18.	Plate	5/8 x 6 x 9 SAE 1020 HR c/s	2
19.	STD. B.I. Pipe	1-1/2 Nom. x 61	1
20.	Cover	1/4 soft Gray Felt	As Req.
	Cover	12 oz. Canvas	As Req.
21.	Thimble	Cable Dia. 12-15/16 x 11/16 x 1-9/32 x 1-1/16 Wire Rope	2
22.	Roebling Blue Center Cable	5/16 Dia. x 31-1/4 Length (6 x 19)	2
23.	Roebling Hook with Safety Catch	#5	2
24.	Flat Washer	5/8	4
25.	Plate	1/2 x 6 x 8-3/16 SAE 1020 HR	2
26.	Round Pin Anchor Shackle	Drop Forging SAE 1025	6
	Hex. Nut	5/8-11	6
	Hex. Head Bolt	5/8-11 x 3-1/2	6
	Cotter Pin	1/16 x 1	6
27.	Bolt Assembly		2
	Pin	1/8 Dia. x 2 SAE 1020 CR	2
	Screw	1/2 Dia. x 4 SAE 4140 HR	2
	Hard White Felt	1/4 x 2 Dia.	2
	Head	2 Dia. x 3-3/4 SAE 1020 CR	2
28.	Nut (within Fuselage)	7/8 Dia. x 4-1/4 SAE 1020 CR	2
29.	Hex. Bar	7/16 x 3/4 SAE 1020 CR	2

Figure 12—Hoisting Fuselage Forward Section



1. 5/16" Shackle
2. 3/16" x 2-1/2" x 4" Mild Steel Plate
3. 1" I.P. x 10" Std. B.I. Pipe
4. 1" I.P. x 94" Std. B.I. Pipe
5. 2" x 12" x 9" Oregon Pine cut to fit
6. 5/16" "U" Type Cable Clip
7. 3/8" x 3" x 6" Mild Steel Plate
8. 7/16" Shackle
9. 3/8" x 3" x 12" Mild Steel Plate
10. 1/2" Shackle
11. 5/16" Dia. x 144" Finish Length Roebling Blue Center Cable
12. 1/2" Felt and Canvas
13. 5/16" Shackle
14. 1/4" Dia. x 66-1/2" Finish Length Roebling Blue Center Cable
15. 4" x 1/4" x 92" Rusco Woven Webbing or equivalent
16. 1/8" x 1-1/2" x 6-1/2" Mild Steel Bent Plate
17. 1-1/2" Harness Buckle
18. 1-1/2" x 3/16" x 148" Rusco Woven Webbing or equivalent
19. 4" x 1/4" x 121" Rusco Woven Webbing or equivalent
20. 3/16" x 4" x 4-1/2" Mild Steel Plate (Rivet as required)
21. #5 Roebling Safety Hook
22. 1/4" Dia. x 58-1/2" Finish Length Roebling Blue Center Cable

Figure 13—Hoisting Fuselage Aft Section

Sling Service No. K13601

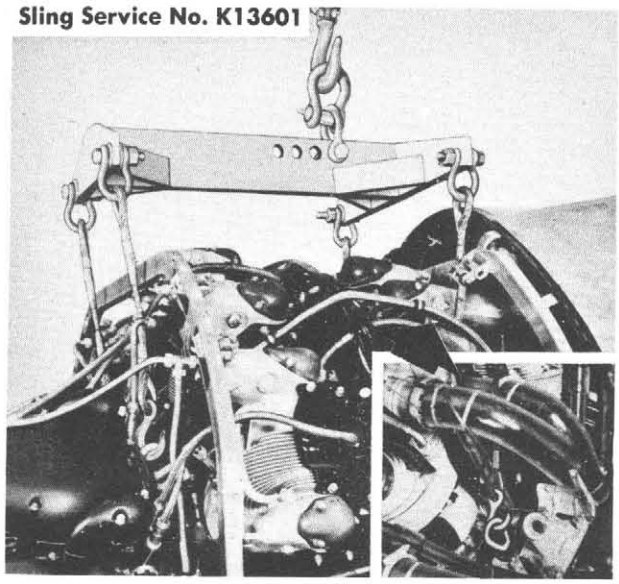
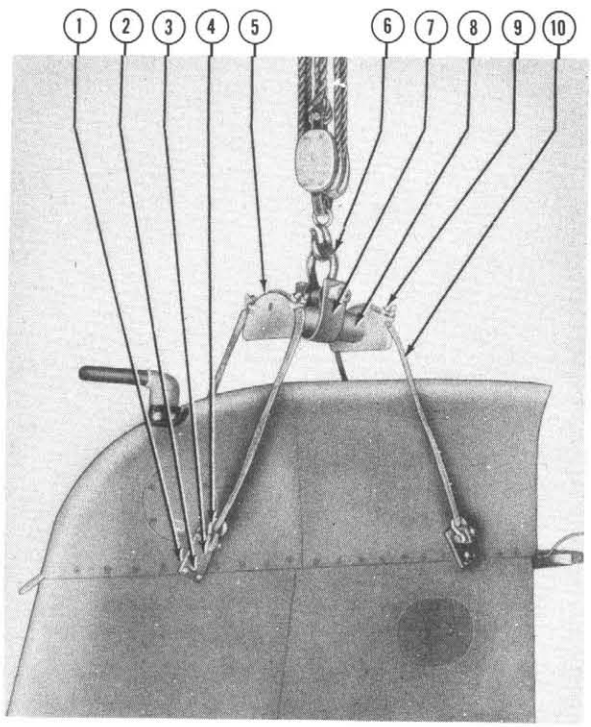
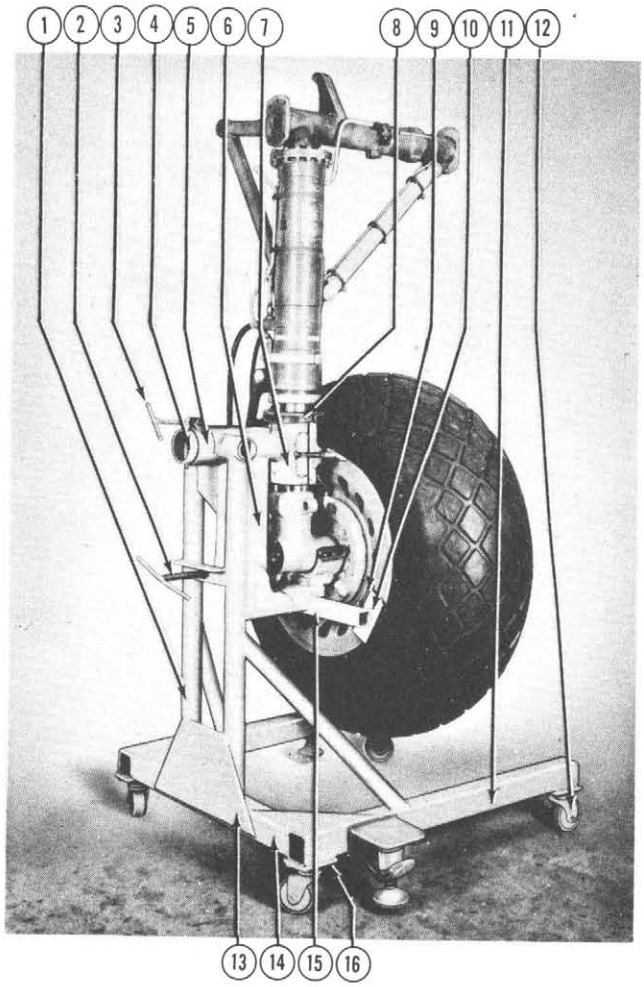


Figure 14 — Hoisting Engine



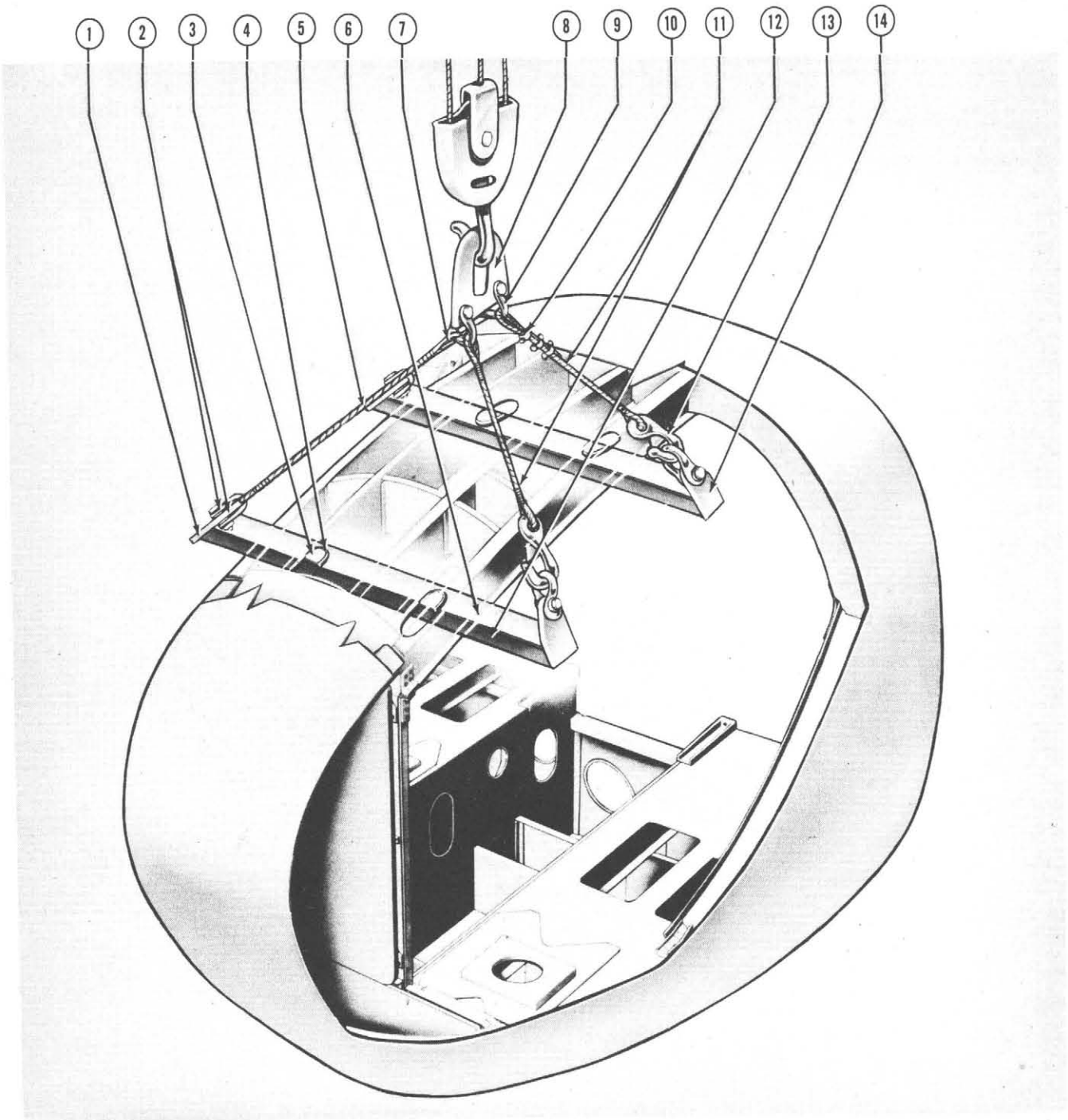
1. ⅛" Leather Cover
2. 10-24 Machine Screw
3. 1½" x 1½" x ¼" x 3" Tee
4. ¼" Shackle
5. ⅜" x 3" x 6" Mild Steel Plate
6. ⅝" Shackle
7. ¼" x 2" x 9" Mild Steel Plate
8. 1½" Inside Dia. x 7½" STD. B.I. Pipe
9. ¼" "V" Type Cable Clamp
10. ¼" Dia. x 36" Finish Length Roebling Blue Center Cable

Figure 15 —Hoisting Vertical Stabilizer



1. 2" Inside Dia. x 40" Standard Blue Iron Pipe
2. ¾" — 10 Tee Bolt
3. ⅝" — 11 Tee Bolt
4. 3½" Inside Dia. x 15" Standard Blue Iron Pipe
5. 4" Inside Dia. x 7" Standard Blue Iron Pipe
6. 3" x 3" x .200" x 24" SAE 1025 H.R. Square Tube
7. 5" Inside Dia. x 7¾" Standard Blue Iron Pipe
   ½" Dia. Hinge Pin
8. ¼" Leather
9. ¼" Leather
10. ⅜" x 2½" x 6" Mild Steel Plate
11. 3" x 3" x .200" x 43" SAE 1020 H.R. Square Tubing
12. 1-74C1 Darnell Castor or equiv.
13. ¼" x 10" x 20" Mild Steel Plate
14. 3" x 3" x .200" x 32" SAE 1025 H.R. Sq. Tubing
15. 2" x 2" x .145" x 22" SAE 1025 H.R. Steel Tube
16. ¼" x 10" x 20" Mild Steel Plate

Figure 16 — Main Landing Gear Wheel Dolly



Sling Service No. K13901

Ref. No.	Name	Size and Material	No. Req.
1.	Bracket	1/4 x 3 x 4-9/16 SAE 1020 CR	2
2.	Spacer	1-1/2 Dia. x 3/16 SAE 1020 CR	8
3.	Plate	1/2 x 1-1/4 x 2-5/8 SAE 1020 CR c/f	4
4.	Pad	1/8 x 1/2 x 4 Leather	4
5.	Roebling Blue Center Cable	1/4 x 37 (6 x 19)	2
6.	Hard White Felt Covering	3/16	As Req.
7.	Wire Rope Thimble	1/4 Dia. 11/16 Width 1-3/8 Length	2
8.	Hoisting Link	5-3/4 x 4-1/4 x 1/2 SAE 1020 HR	1
9.	Anchor Round Pin Shackle	1-7/16 x 2-7/32	6
	Drop Forging	SAE 1025	6
	Hex. Nut	7/16-14	6
	Hex. Head Bolt	7/16-14 x 2	6
	Cotter Pin	1/16 x 3/4	6
10.	Safety Wire Rope Clip	1-4 Dia. x 2400 lbs. Wt.	6
11.	Roebling Blue Center Cable	1/4 x 35 (6 x 19)	2
12.	Tube	1/2 Sq. x .140 Wall x 33-1/2 SAE 1025 HR	2
13.	Chain Safety Snap Hook	For Chain Size 1/4 Load 450 lbs.	2
14.	Bracket	1/4 x 2 x 4-9/16 SAE 1020 CR	2

Figure 17 — Hoisting Fuselage Nose

CAUTION

The nose wheel should not touch the ground when jacking at this point.

(2) WING.—Each wing has two jacking points on the rear spar: one point *(figure 21)* is on the inner wing panel; the other point is outboard of the nacelle. If jacks high enough to reach the wing jacking points are not available, use supporting stands for shorter jacks. Make certain the stands are strong enough to support the airplane. With wing jacks of ample jacking range, it is not necessary to use restraining links on the oleos.

(3) LANDING GEAR.—A jack point *(figure 21)* is located on the lower end of each main landing gear shock absorber strut. Use either of these points when it is necessary to remove a tire or wheel, etc.

Service No. K14001

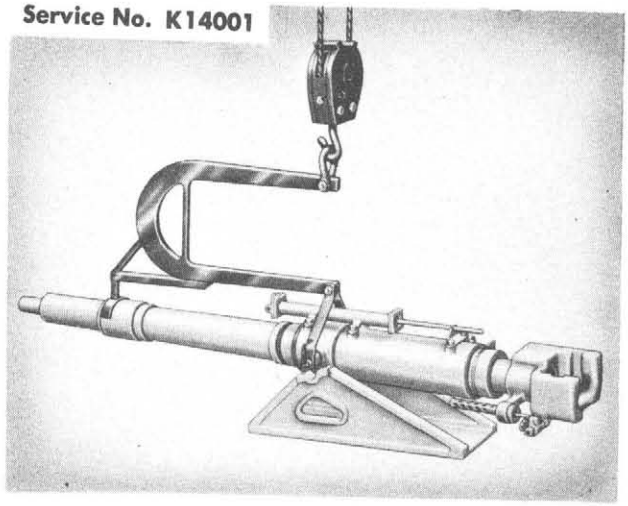


Figure 19 — Hoisting 75 mm Cannon

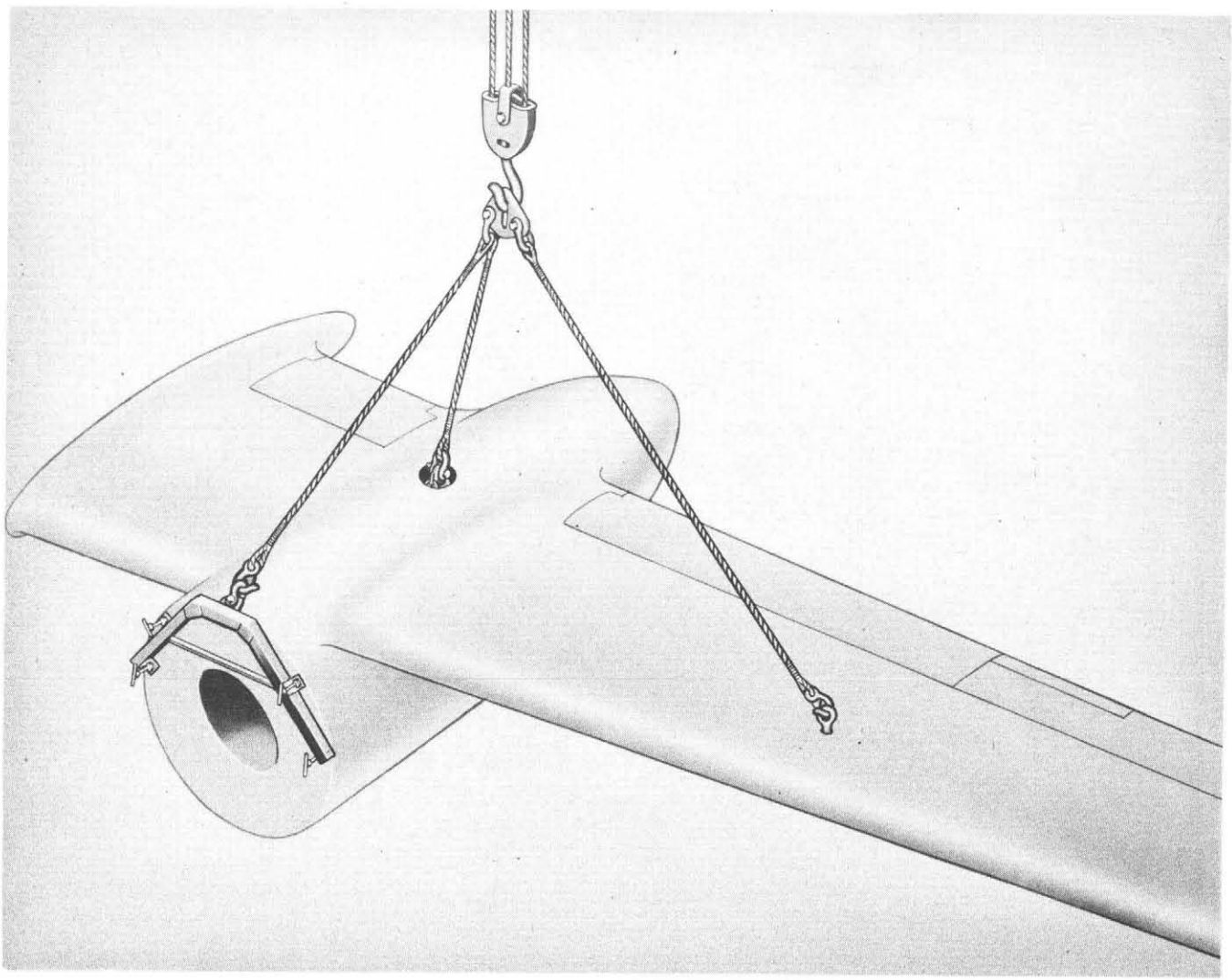


Figure 18 — Hoisting Wing

3. MOVABLE SURFACES AND SURFACE CONTROLS.

a. GENERAL.—The ailerons, elevators, rudder and trim tabs installed on the airplane are conventional in design and are operated by means of a single set of standard manual controls installed in the pilot's compartment. The similarity with other airplanes ends at this point, however, as several types of mechanisms are used to actuate the flight surfaces.

The wing flaps also differ from those used on most airplanes. They are attached to the wing by a linkage which permits greater extension than the standard flap mechanism provides. Efficiency is further increased by the use of deflectors which direct air flow to the top of the flap, providing additional drag.

b. MOVABLE SURFACES. *(See figure 38.)*

(1) GENERAL.—Movable surfaces used to control the airplane while it is in flight consist of two fabric-covered ailerons, two metal aileron trim tabs, two fabric-covered elevators and tabs, a fabric-covered rudder and tab, and four metal wing flaps equipped with self-acting deflectors.

To facilitate the pilot's control of the airplane, the ailerons, elevators and rudder are balanced aerodynamically and statically, and all the moving surfaces are attached with hinges containing sealed-in-grease bearings. A rubberized canvas gap seal is installed in the openings between the ailerons and the wing, the elevators and the horizontal stabilizers, and the rudder and the vertical stabilizer. The method of installation permits quick removal of the seals from the fixed surfaces.

(2) AILERONS. *(See figure 39.)*

(a) DESCRIPTION.–One aileron is attached to each wing panel, extending inboard from the wing panel tip for a distance of 11 feet. The rubber-impregnated gap seal which covers the opening between the ailerons and the wing is attached to the surfaces with screws and equipped with a metal zipper. The zipper permits rapid removal of the ailerons from the wing.

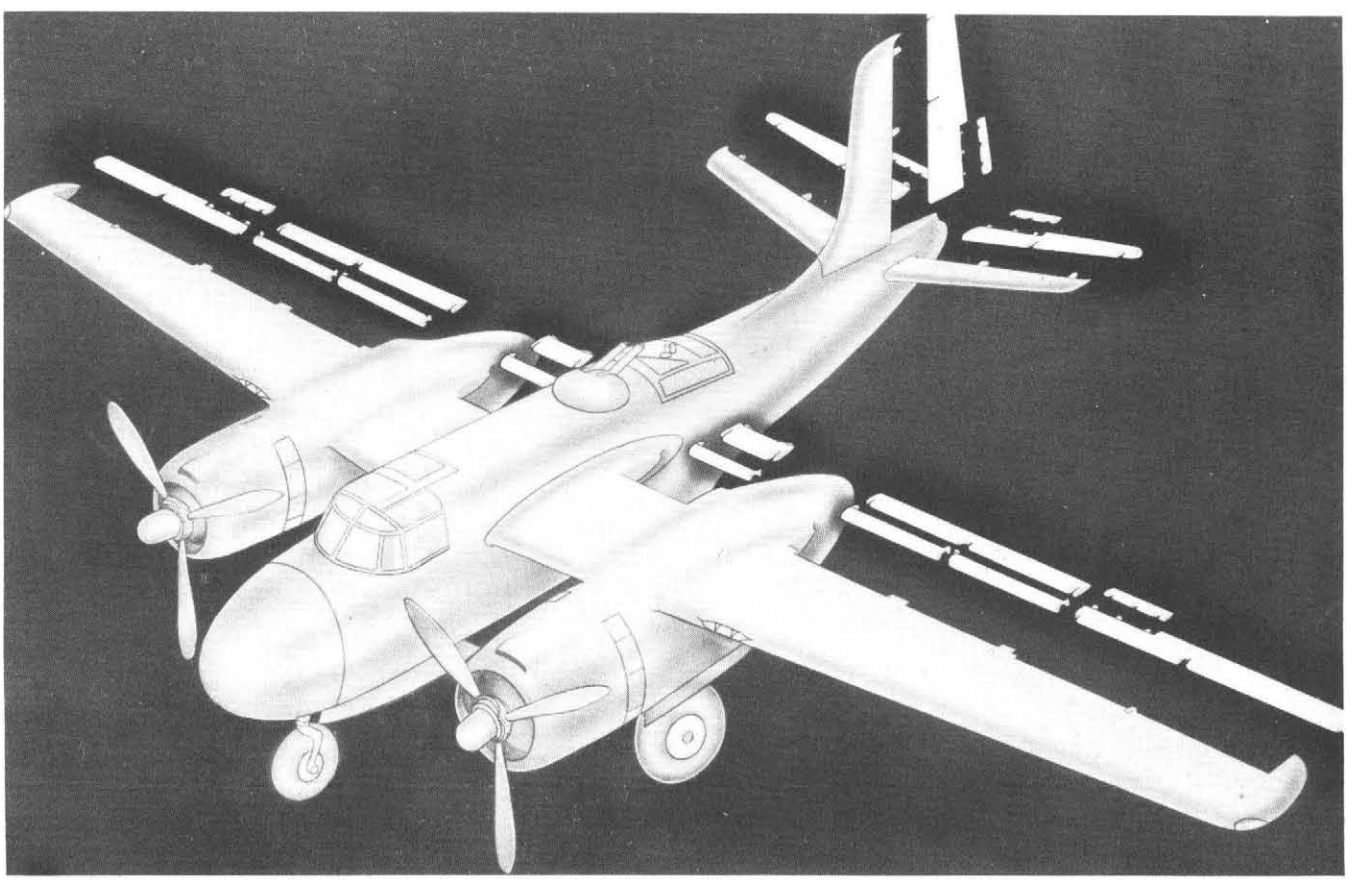


Figure 38—Movable Surfaces