

**INFORMATION REPORT INFORMATION REPORT**

**CENTRAL INTELLIGENCE AGENCY**

This material contains information affecting the National Defense of the United States within the meaning of the Espionage Laws, Title 18, U.S.C. Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

**S-E-C-R-E-T**  
**NO FOREIGN DISSEM**

<b>COUNTRY</b> Czechoslovakia	<b>REPORT</b> [Redacted]	50X1-HUM
<b>SUBJECT</b> Ground Service Manual for IL-18 Aircraft	<b>DATE DISTR.</b> 8 OCT 1962	
	<b>NO. PAGES</b> 1	
	<b>REFERENCES</b> RD	

**DATE OF INFO.** [Redacted]

**PLACE & DATE ACQ.** [Redacted] 50X1-HUM

THIS IS UNEVALUATED INFORMATION. SOURCE GRADINGS ARE DEFINITIVE. APPRAISAL OF CONTENT IS TENTATIVE.

[Redacted]

[Redacted] a 51-page document consisting 50X1-HUM

of the ground service manual for IL-18 aircraft operated by the Czech airlines (CSA).

50X1-HUM

[Redacted]

**S-E-C-R-E-T**  
**NO FOREIGN DISSEM**

GROUP 1  
Excluded from automatic  
downgrading and  
declassification

5  
4  
3  
2  
1

STATE	X	ARMY	X	NAVY	X	AIR	X	NSA	X	OCR		ORR	EV	X	DIA	X
(Note: Washington distribution indicated by "X"; Field distribution by "#".)																

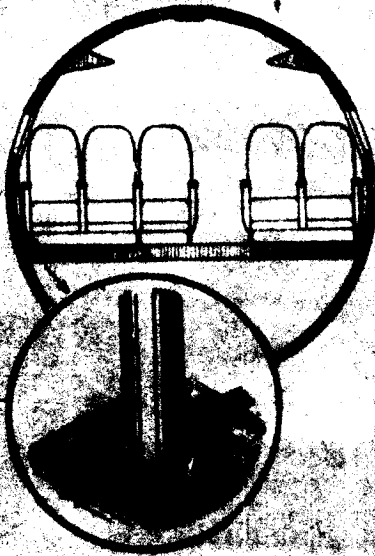
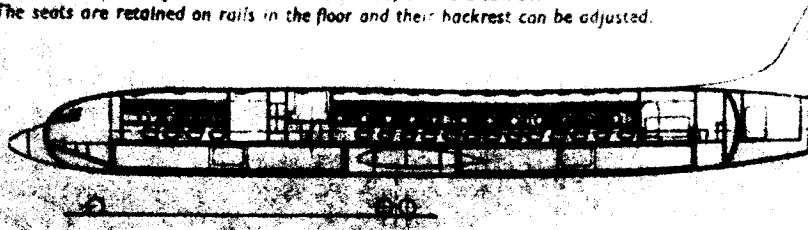
**INFORMATION REPORT INFORMATION REPORT**

The forward passenger cabin situated at the rear offers seats for 10 passengers in two rows of 5 seats' row. There is even space to place a stretcher, but seats are not recommended.

The main wardrobe for coats and hand baggage of about 10 passengers and a space for 10 seats with worktables, electric boilers and food containers' racks connect the forward cabin with the main passenger cabin.

The main passenger cabin offers 13 rows of 5 seats for accommodation of 65 passengers. At the rear row, the passengers' individual lighting system and cold-air outlet as well as the forward call-button are fitted in the lower part of the seat-back. In front of No. 5 seat row (first row of main passenger cabin) two CSA baby-baskets, one on each side, can be attached.

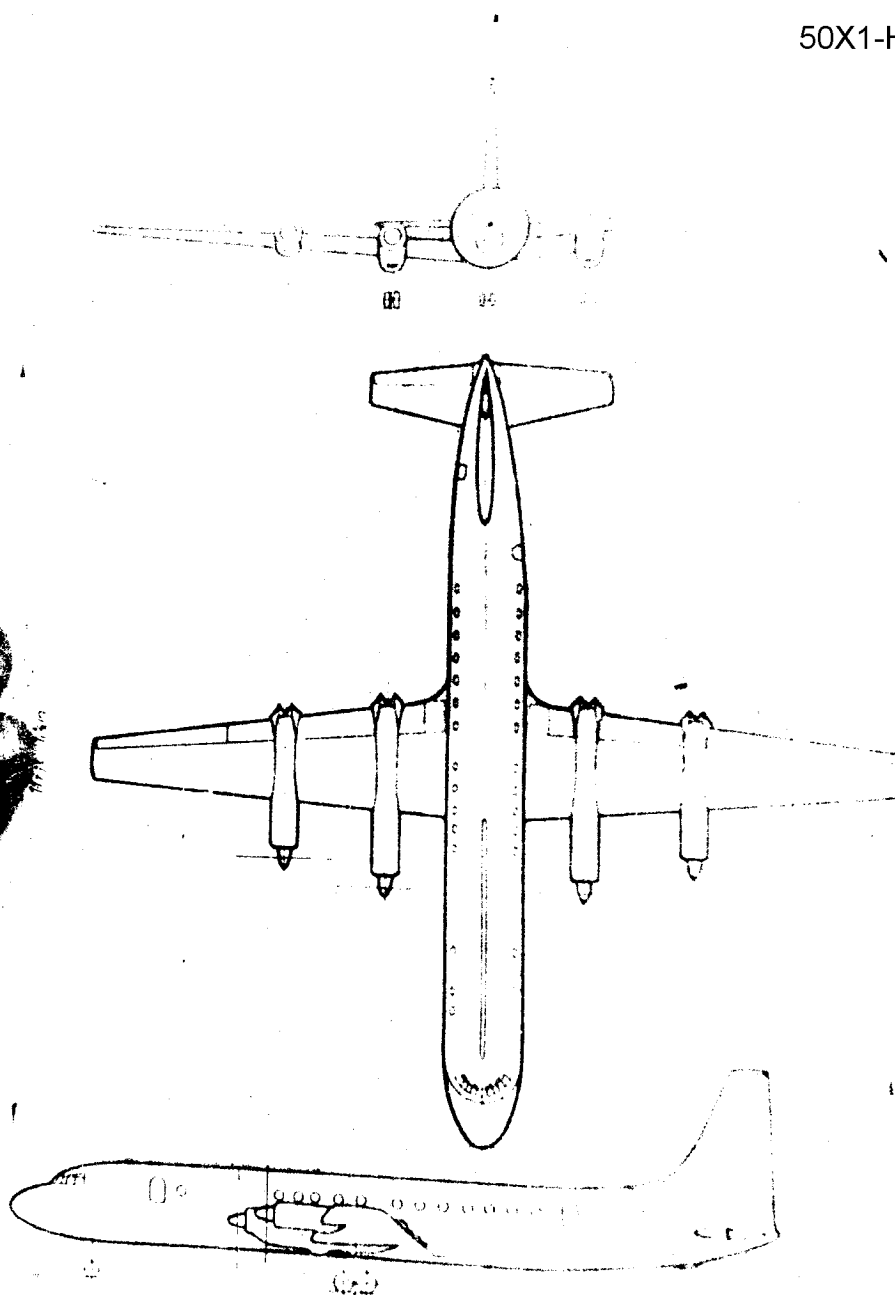
The seats are retained on rails in the floor and their backrest can be adjusted.



NO FOREIGN DISSEM

SECRET

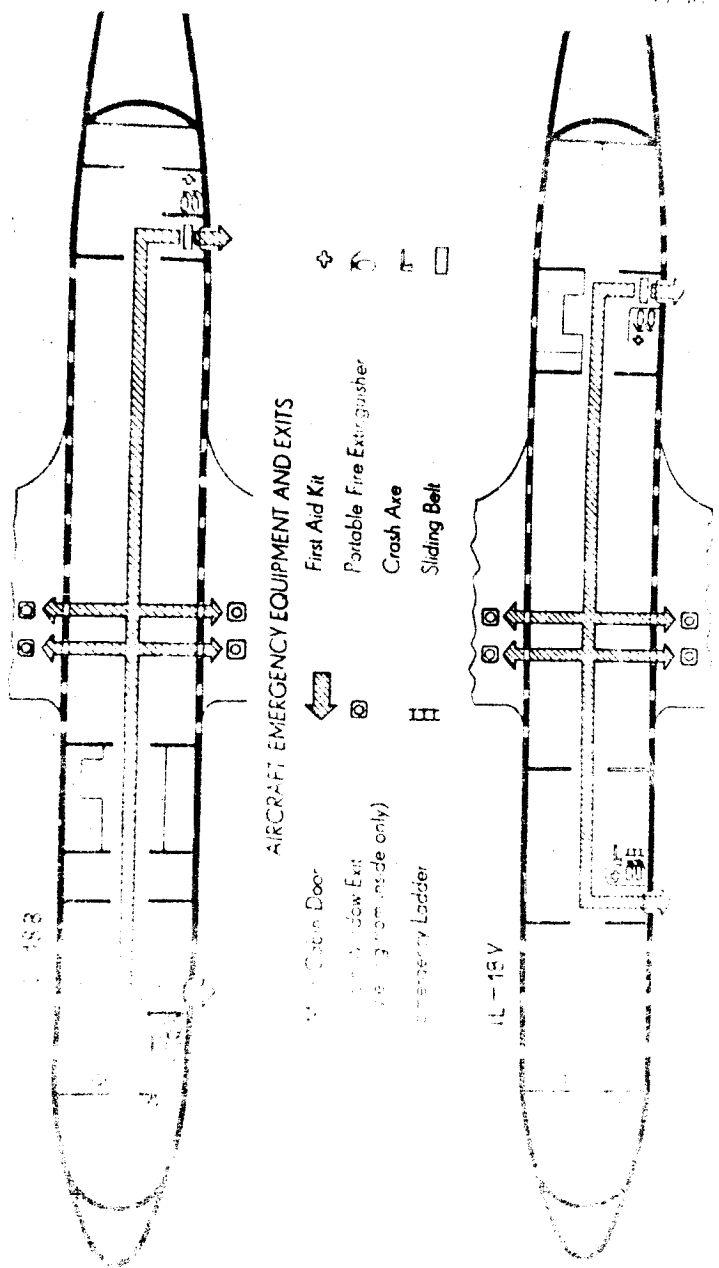
50X1-HUM



DISSEM

GROUP 1  
Excluded from automatic  
downgrading and  
declassification

SECRET



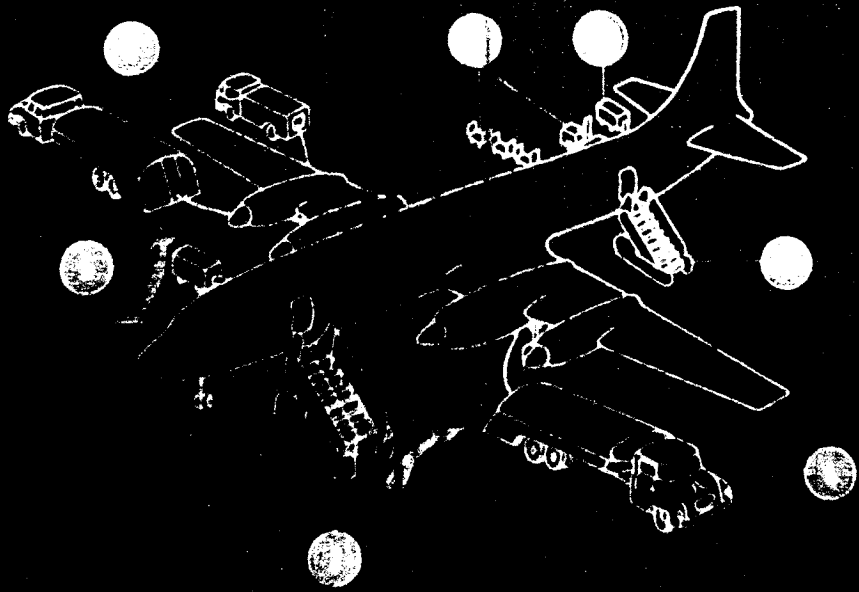


OPERATION 3

only for B-15 B



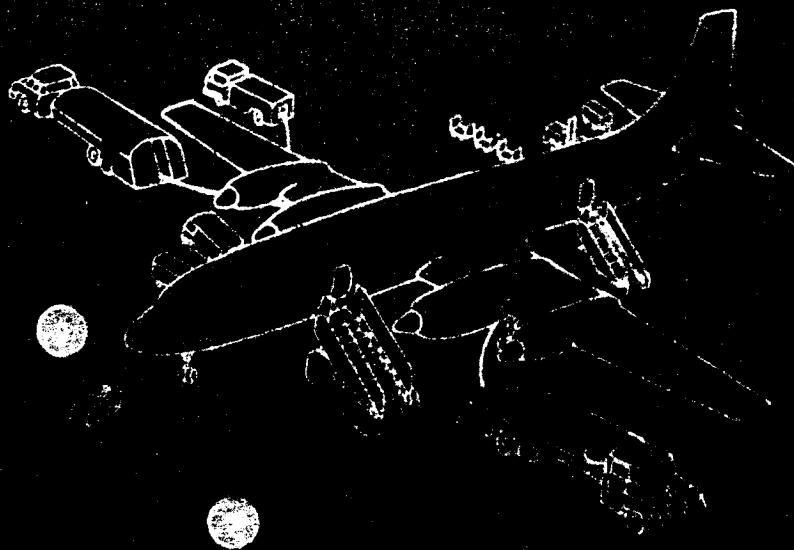
- FUEL TRUCKS
- GROUND POWER UNIT
- PASSENGER STAIRS
- BAGGAGE CARTS
- AIR CONDITIONING UNIT



SECTION



- LAVATORY SERVICE CART
- MAINTENANCE CART



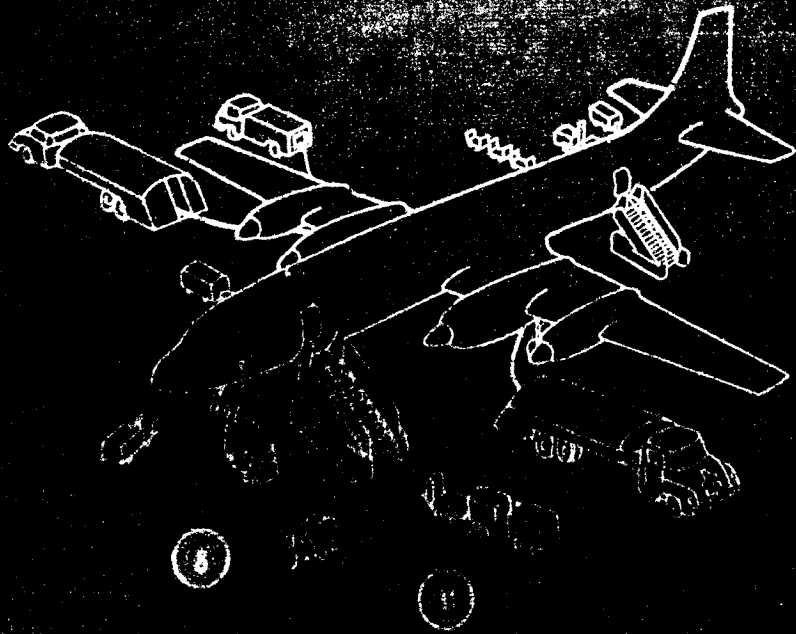
CATERING SERVICE



CABIN CLEANING CART



CATERING SERVICE CART



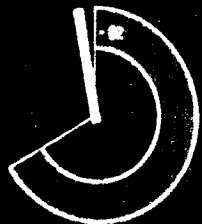


SECTION II

SERVICE EQUIPMENT

- ① CHOCKS
- PASSENGER STAIRS
- GROUND POWER UNIT (28V/1200A)
- FUEL TRUCKS
- AIRCRAFT CONDITIONING UNIT
- GROUND SERVICE EQUIPMENT
- LAVATORY SERVICE CARTS
- CATERING SERVICE CARTS
- MAINTENANCE CARS
- BAGGAGE CARTS
- ① CATERING SERVICE CART
- RAMP SUPERINTENDANT

4
2
1
2
2
1
1
1
1
10-12
1
2

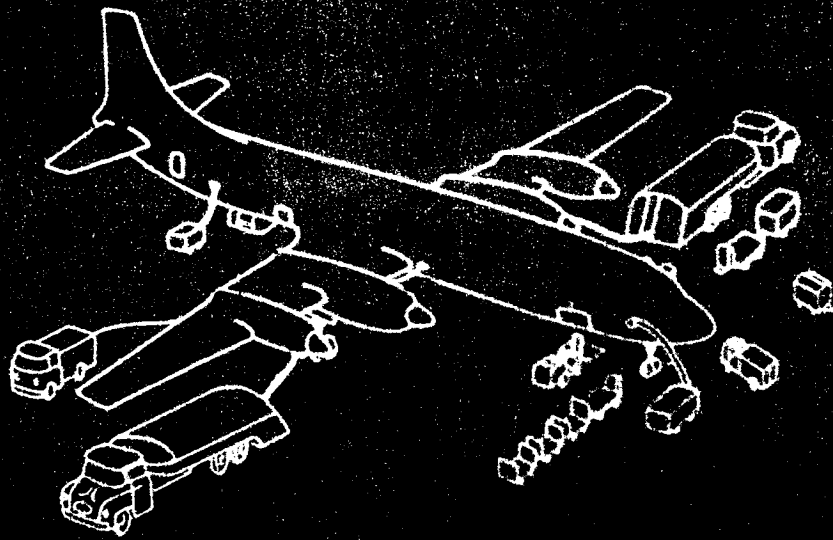


POSITIONING OF SERVICE EQUIPMENT

2 minutes before arrival of the aircraft all the necessary servicing the aircraft have to be positioned on the ground in the proper position.

SECTION II

SIGNATURE

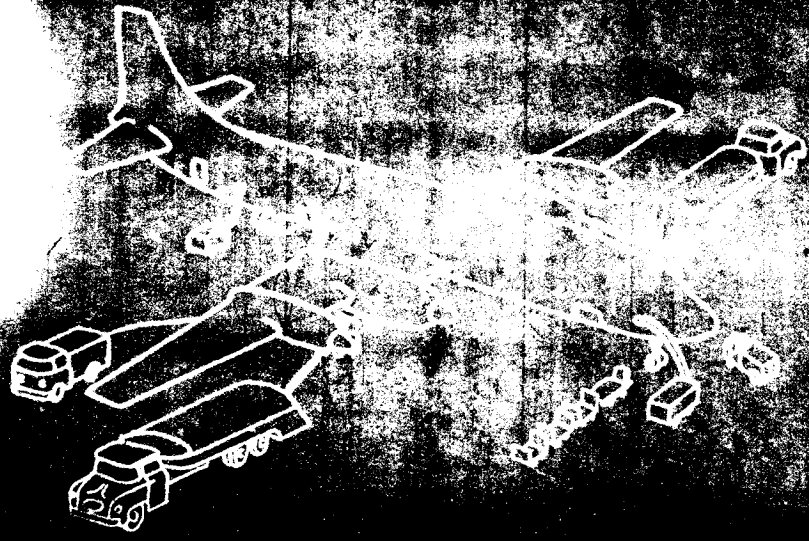


Handling area is shown



LAVATORY SERVICE CART

OPERATION 7



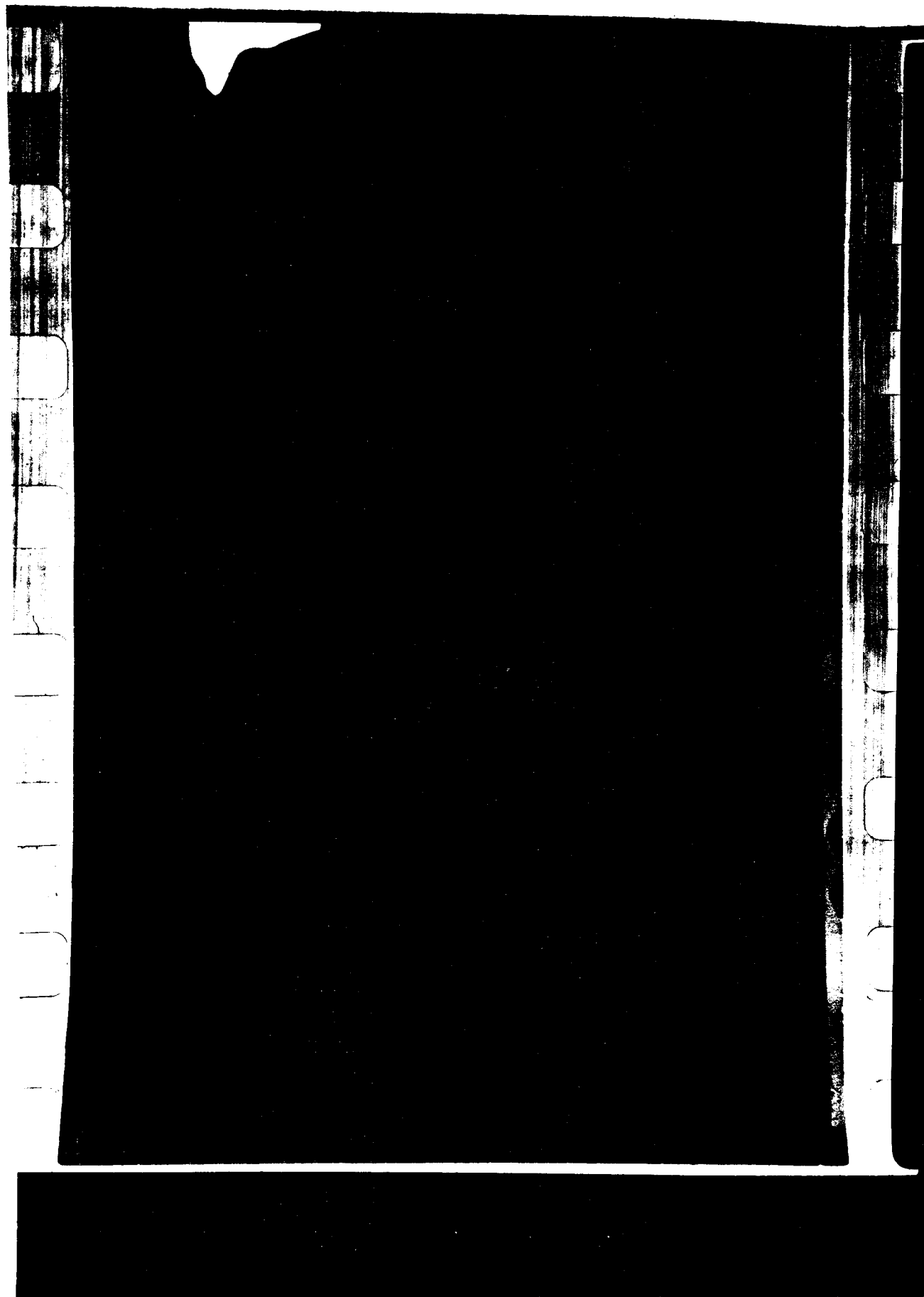
Handling area is leaving

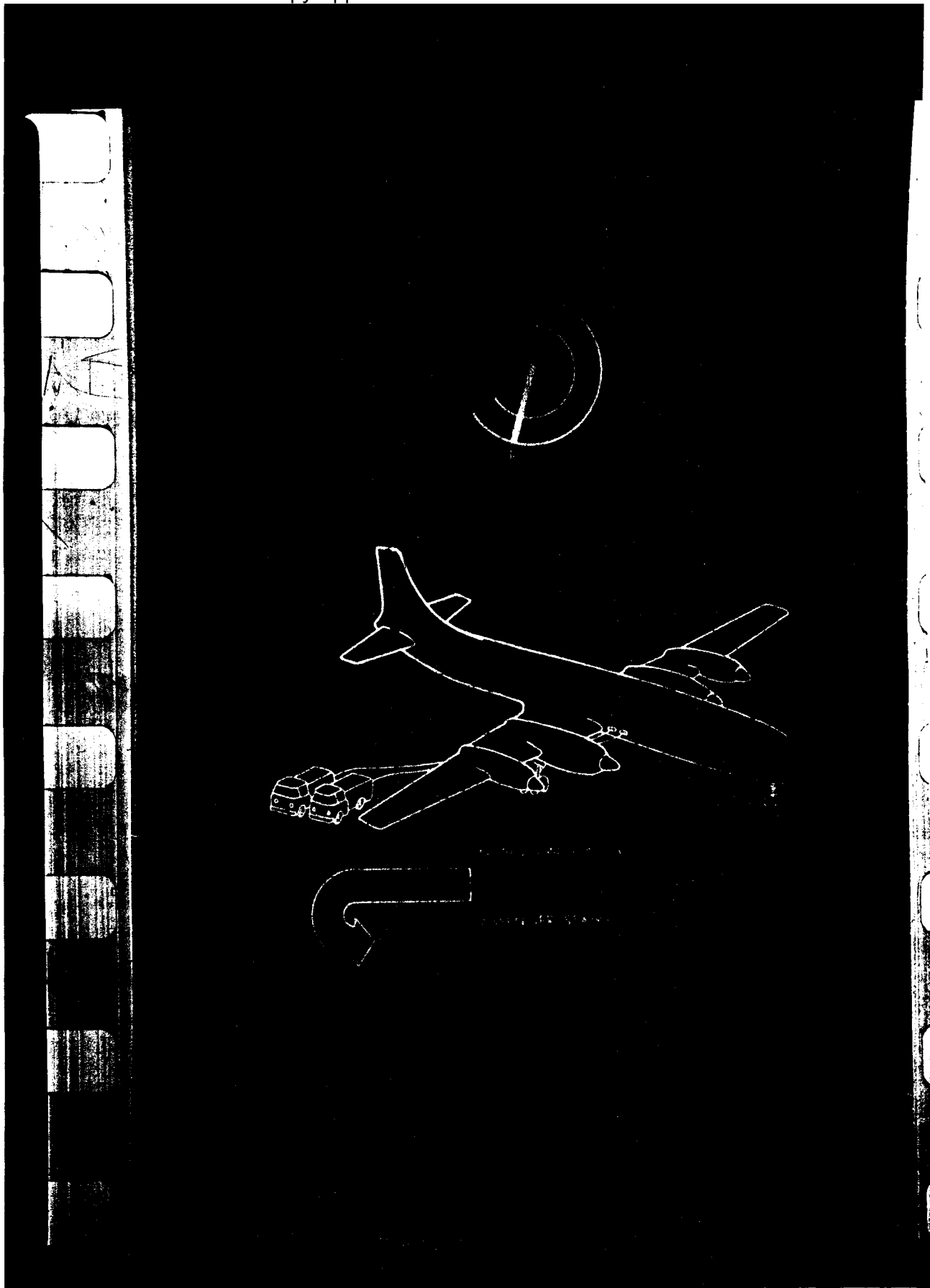


CATERING SERVICE CART

CABIN CLEANING CART





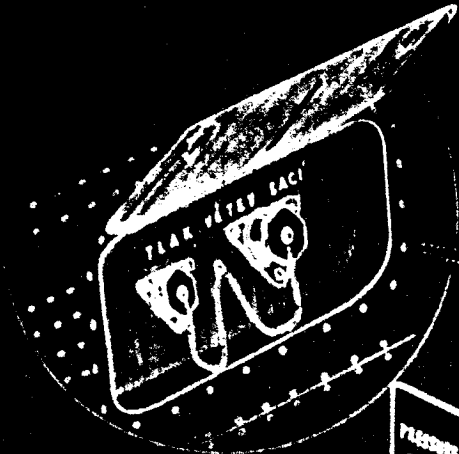




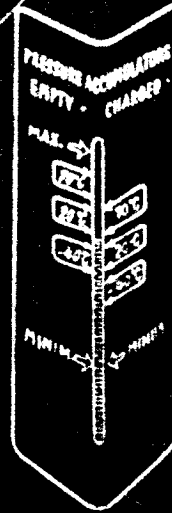








Two external hydraulic couplings situated on the left hand side of each onboard engine provide for checking the hydraulic system with the aid of a hydraulic ground unit.



Hydraulic system  
 16.5 IMPS  
 Hydraulic system  
 18.8 IMPS  
 Hydraulic system  
 Mixing the AM  
 kinds of hydraulic  
 suitable

SECTION III

NITROGEN FILLING

For nitrogen system the technical nitrogen of first or second quality... nitrogen must be free of dirt, dust and moisture with max. permissible...  
 Normal pressure in nitrogen system 130 kg per sq cm (1849 psi)  
 Caution: For 10 deg. Cent. there is pressure change of 5 kg per sq cm...  
 pressure in the emergency brakes system is 100 kg per sq cm (1422 psi).  
 dry (water free) air should be done only in extreme necessity. However, the nitrogen system must not exceed 30 per cent.

OXYGEN EQUIPMENT

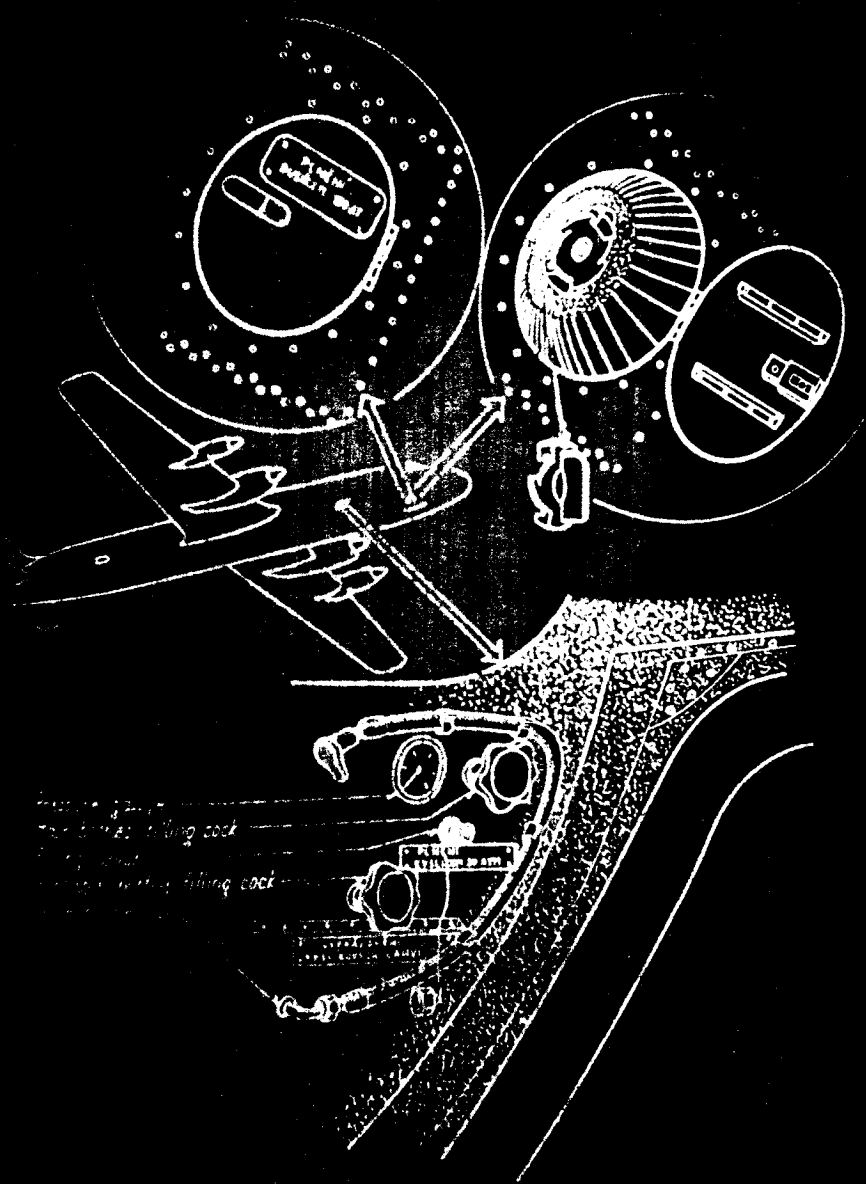
A low pressure (30 kg per sq cm — 429.55 psi) oxygen equipment consists of  
 a) Common emergency oxygen system for the crew and  
 b) Portable oxygen breathing apparatus for passengers, etc.  
 Two oxygen bottles of the capacity 24 litres (847 cu ft) each, supply the crew system. Two bottles of the capacity 17 litres (603 cu ft) each, are intended for passengers. The charging panel and two main oxygen bottles are mounted on the righthand side of the hold door.  
 For charging, pure medical oxygen is used at charging pressure 150 kg per sq cm (2149 psi) reduced in the system approximately to 30 kg per sq cm (429.55 psi), with respect to air temperature (see Table).

Temperature	F°													
	95	86	77	68	59	50	41	32	23	14	+5	-4	-13	-22
Pressure	kg/cm²													
	31	31.6	31	30.6	30	29.5	29	28.4	28	27.4	26.9	26.3	25.7	25.1
	psi													
	457	454	448	442	436	429	423	416	409	402	395	388	381	374

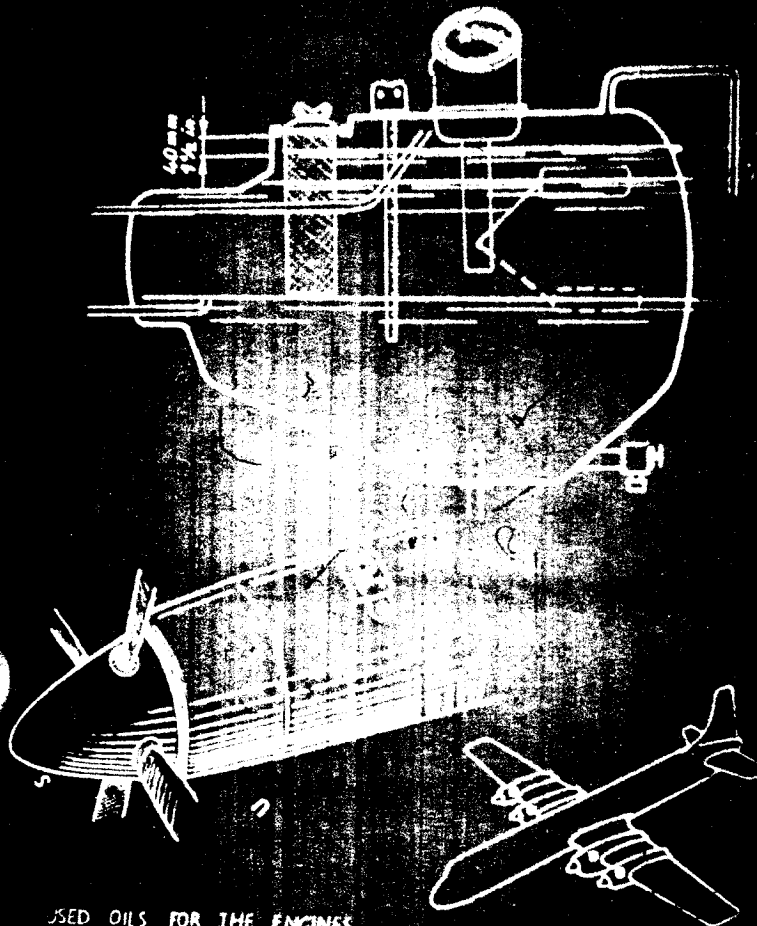
Portable oxygen bottles can be charged from the main oxygen system... section (see Fig.)

Caution: During charging avoid any oil or grease from the... and explosion hazard.

# NITROGEN AND OXYGEN



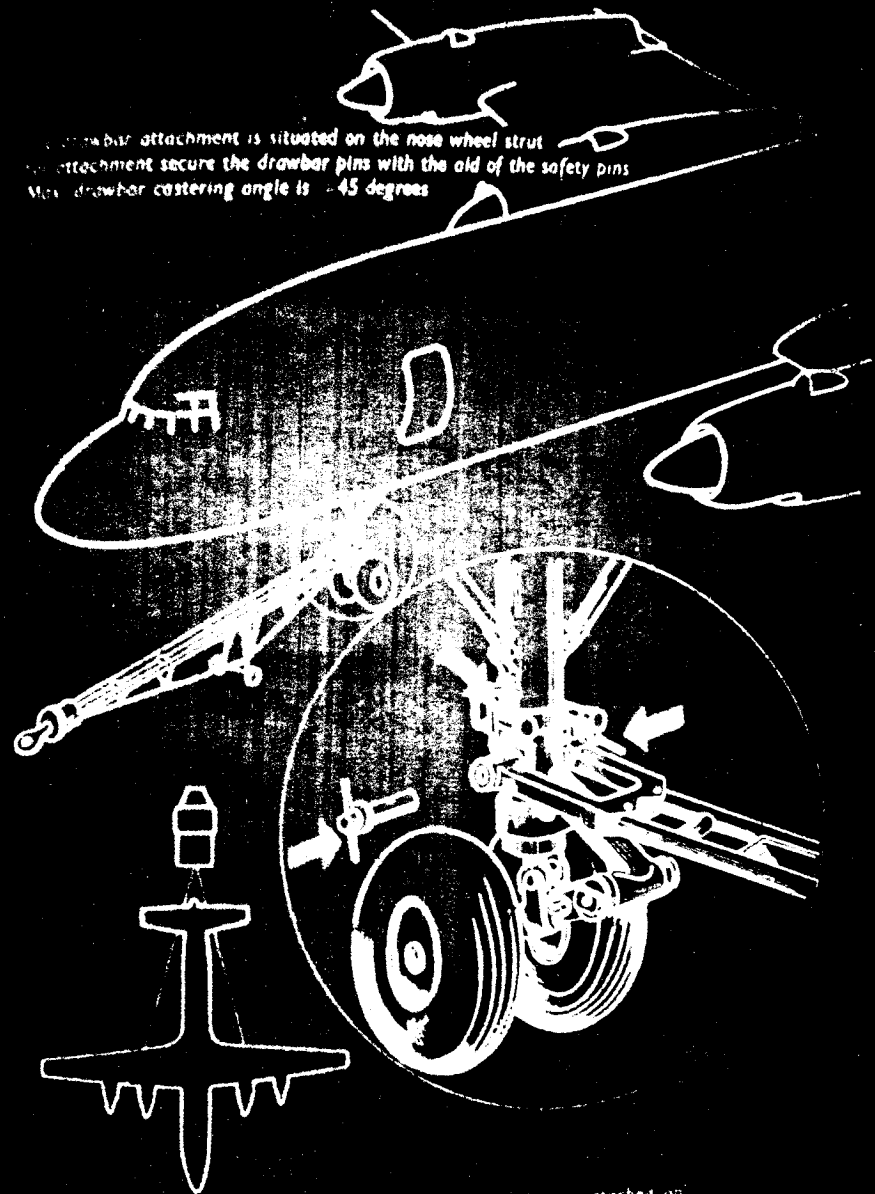
The Nitrogen filling cock  
The Oxygen filling cock



USED OILS FOR THE ENGINES

Basic oil	Additional oil	Note
75 per cent LT 160 KC	25 per cent LB 27 C	Oil can be intermixed
75 per cent MX-1	25 per cent MS-20	
75 per cent D Engr. P. D. - 2000 (Turbine oil - 3)	25 per cent D Engr. P. D. - 2072 Quality 2/10	
75 per cent Mil - O - 6021 B Quality 100 (Turbine oil - 2)	25 per cent Mil - I - 6022 B Quality 1100	
DED - 2479/10 (Turbine oil - 3)		
DED - 2480 (Turbine oil - 5)		

Drawbar attachment is situated on the nose wheel strut  
Attachment secure the drawbar pins with the aid of the safety pins  
Max. drawbar casting angle is -45 degrees



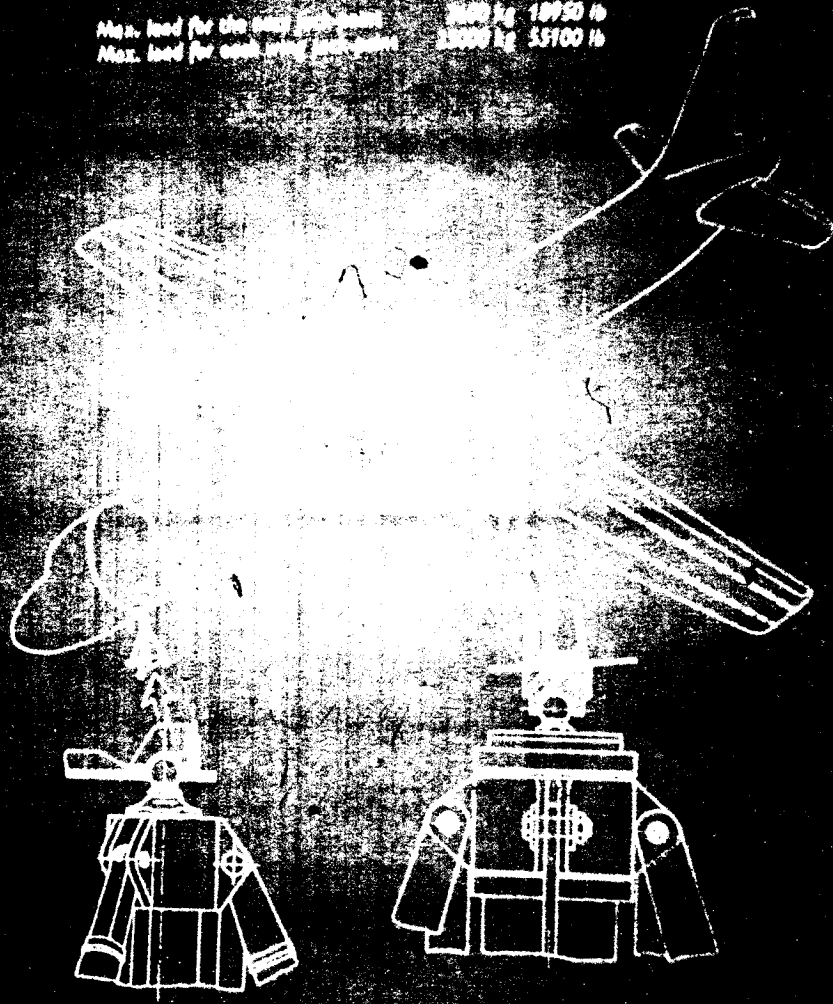
For aft-towing purposes the towing cable with special sleeves attached on  
each main landing gear strut should be used.

SECTION 11

JACKING

Three jack-points are provided for jacking the aircraft. The nose jack point C is located just aft of the main wing root and the two jack-points A and B are on the rear spar of both wings.

Max. load for the main jack-point 3000 kg 10950 lb  
Max. load for each wing jack-point 2000 kg 5500 lb

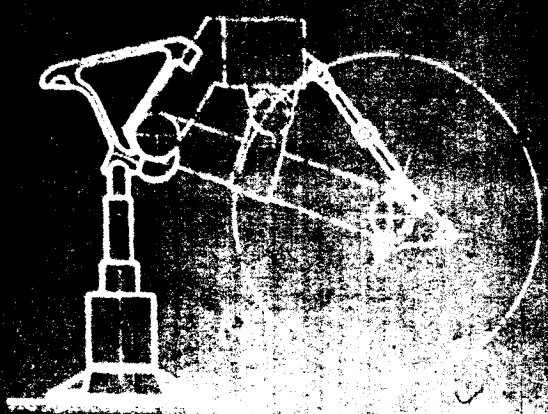


Min. height of nose jack  
Max. height of nose jack  
Min. height of main jack  
Max. height of main jack

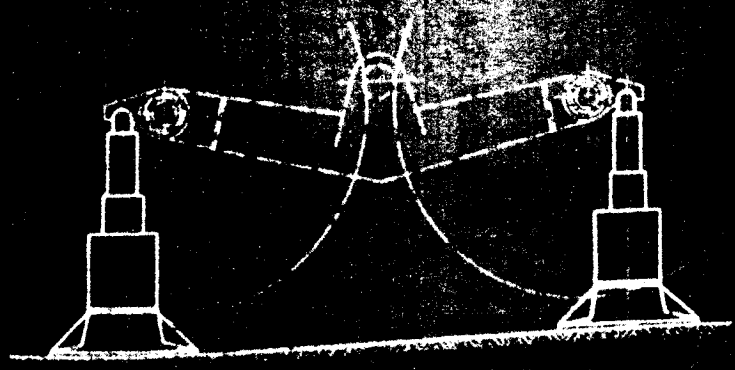
1537 mm 5 ft 1 in  
2665 mm 8 ft 9 in  
1746 mm 5 ft 8 in  
3049 mm 10 ft

### WHEEL REPLACEMENT

Caution: Prior to wheel replacement set the aircraft parking brakes.



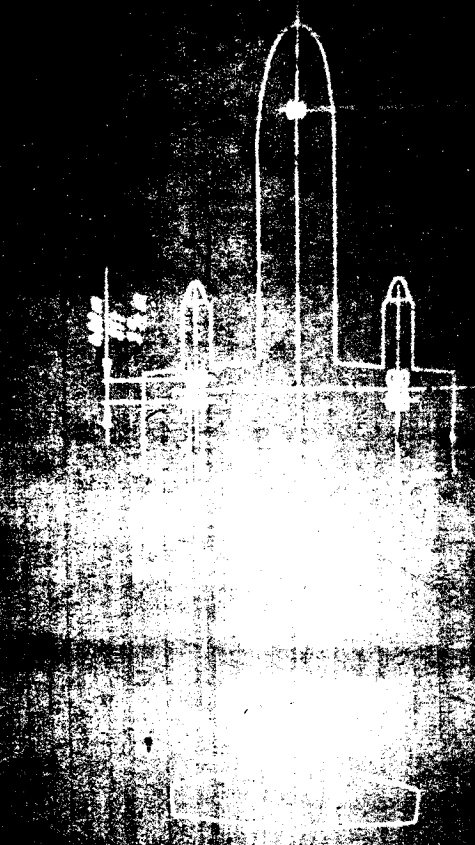
For the nose wheel replacement, use the same jacks as for the main wheels. For replacement use a jack with a height of 20.14 in. (518 mm) and with carrying capacity of 13,000 lb (5,900 kg).



When replacing the main wheel the identical jacks should be used by placing them on the axle.



SECTION 10



Max take-off weight	17,000 kg	37,000 lb
Max landing weight	16,000 kg	35,000 lb
Load on nose gear	2,000 kg	4,400 lb
Load on main gear	2 x 1,800 kg	2 x 3,960 lb

Nose gear

Tire size	700 x 850	27 1/2 x 34
Tire pressure	6 kg/cm <sup>2</sup>	85 psi

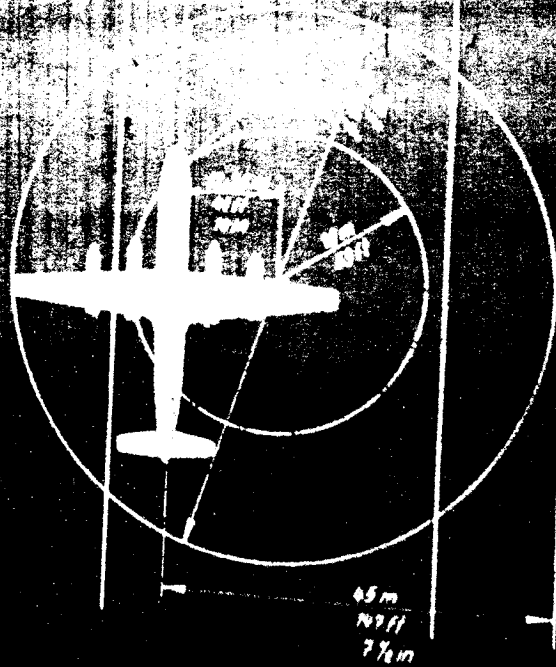
Main gear

Tire size	800 x 865	31 1/2 x 34
Tire pressure	8 kg/cm <sup>2</sup>	115 psi



SECTION IV

The flyable quality and ground maneuvering characteristics are similar to those of conventional piston-engined fighters and do not call for any special precautionary measures.  
Power output is about 1000 horsepower for maximum maneuvering at cruising speeds up to 50 knots.  
The two engines are mounted in tandem and are controlled by the aircraft on the line.

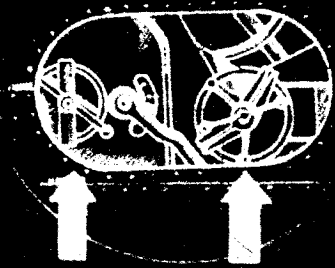


TAXI AND RAMP FACILITIES



Two connections, located on the lower part of the fuselage aft of the nose gear and on the lower rear part of the fuselage provide to connect a hose of the lavatory service cart.

LAVATORY FLUSHING AND CLEANING



Two fittings, located on the lower rear part of the fuselage and on the lower rear part of the fuselage provide to connect a hose of the lavatory service cart.

LAVATORY FLUSHING AND DRAINING  
Two connections, located on the lower rear part of the fuselage, lead to the lavatory  
flushing and on the lower rear part of the fuselage to the lavatory drain hose of the lavatory  
service unit.



Two fitting connections of the utility water, located on the lower rear part of the fuselage, provide to connect the water hose.

UTILITY WATER FILING



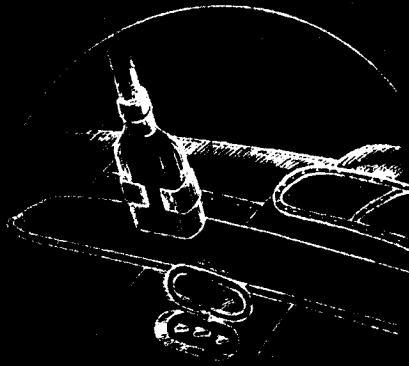


Passenger stairs should be moved into their position immediately after all engines are completely stopped. The height of the rear platform should be 31 in (10 ft 2 in) above the ground.

PASSENGER STAIRS

Two couplings, located on the front and rear starboard side of the fuselage provide for connection of the airconditioning units.

AIRCONDITIONING UNIT



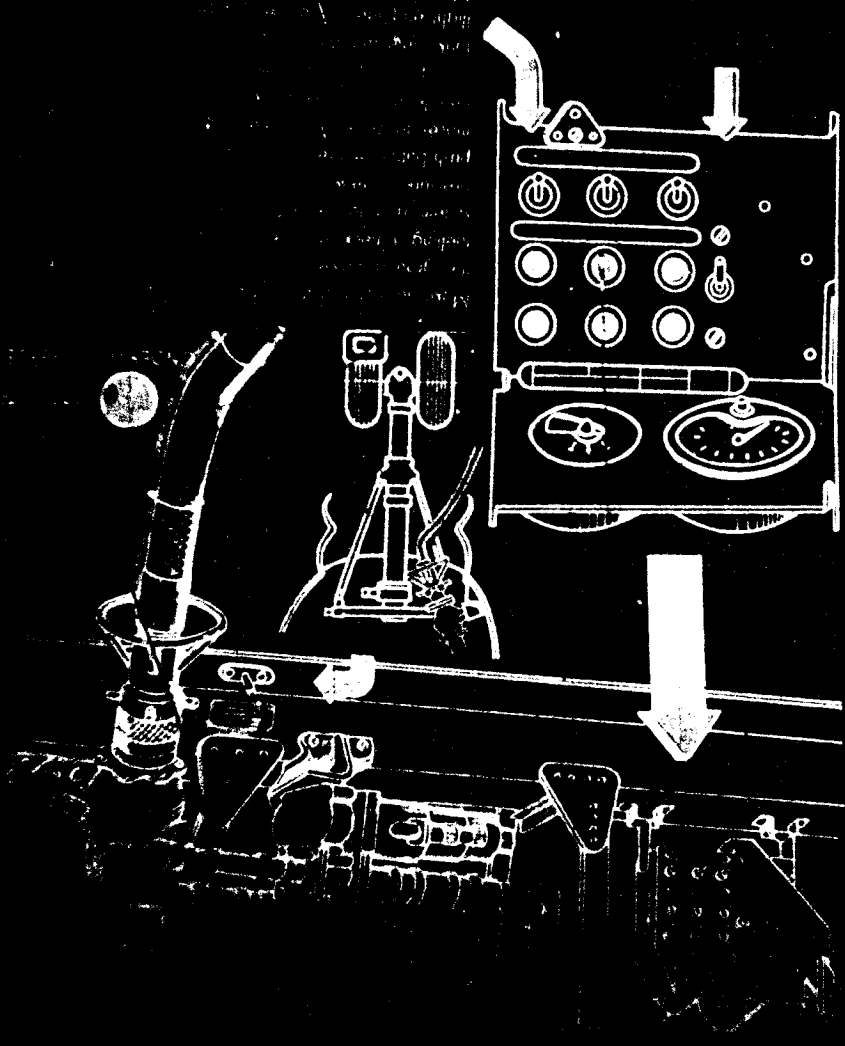
For entry to the aircraft a ground power unit (GPIU) of 28V/1200 A continuous is required.

GROUND POWER UNIT

and disconnect  
and close switch  
and fuel when  
will light and

Pat. No. 2,811,111  
MILITARY AIRCRAFT

By switching the switches of the selected tanks to the UP position, the red bulb lights the refueling is started. By use of the fuel gauge check the fuel quantity of the selected tanks and stop the refueling is completed and stop the refueling. As soon as the cocks of the fuel tanks are closed discharge the hose.





SECTION V

CZECHOSLOVAK AIRLINES  
OPERATION MANUAL II  
AMENDMENT No. 1

New and Revised Pages

Remove and Destroy	*
Dash chart	Crash chart /13 nov 1961/
Station activities	Station activities /13 nov 1961/
Operation 3 (right page)	Operation 3 (right page) /13 nov 1961/
Detail procedures (right page)	Detail procedures /13 nov 1961/ (right page)
Operation 5 (right page)	Operation 5 /13 nov 1961/ (right page)
Operation 7	Operation 7 /13 nov 1961/
Operation 9	Operation 9 /13 nov 1961/

Record the incorporation of this amendment on the Amendment Record Sheet.  
Insert the Amendment Record Sheet after the title page of the Operation  
Manual II - 16.

Published by CIA Technical Communications Department

100

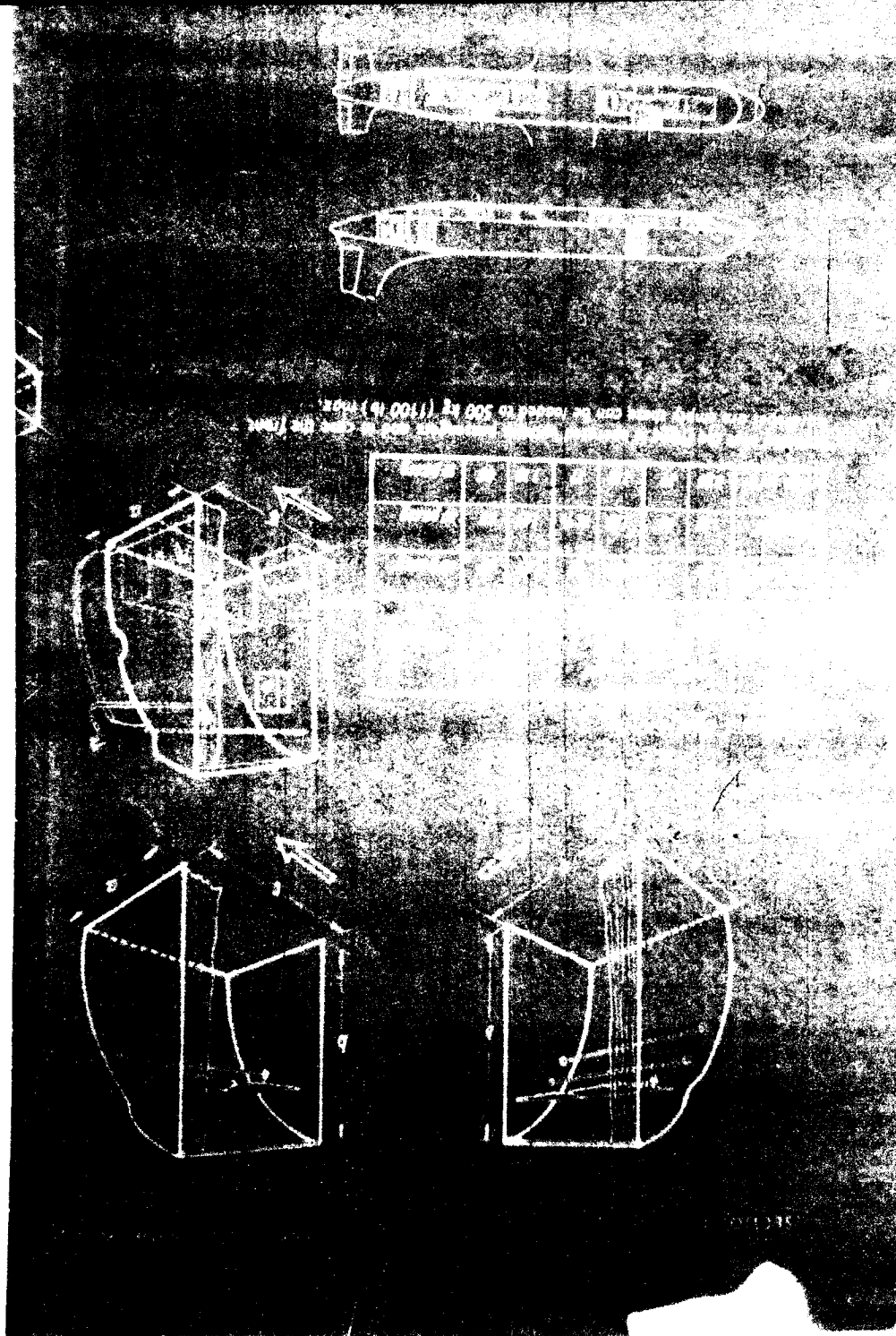
STATUTE BOOK - 1954

AMENDMENTS TO THE STATUTE BOOK

Only amendments published by the Statistical Department in 1954  
may be incorporated in this book.

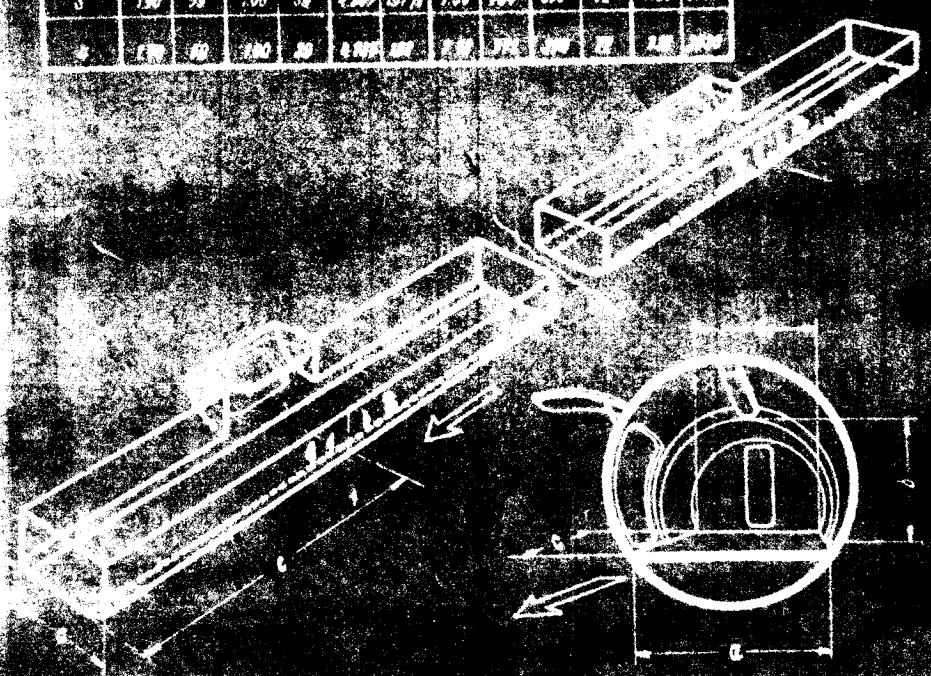
The incorporation of each amendment must be recommended by the

Amendment	Description	Page of
1	...	...
2	...	...
3	...	...
4	...	...
5	...	...
6	...	...
7	...	...
8	...	...
9	...	...
10	...	...
11	...	...
12	...	...
13	...	...
14	...	...



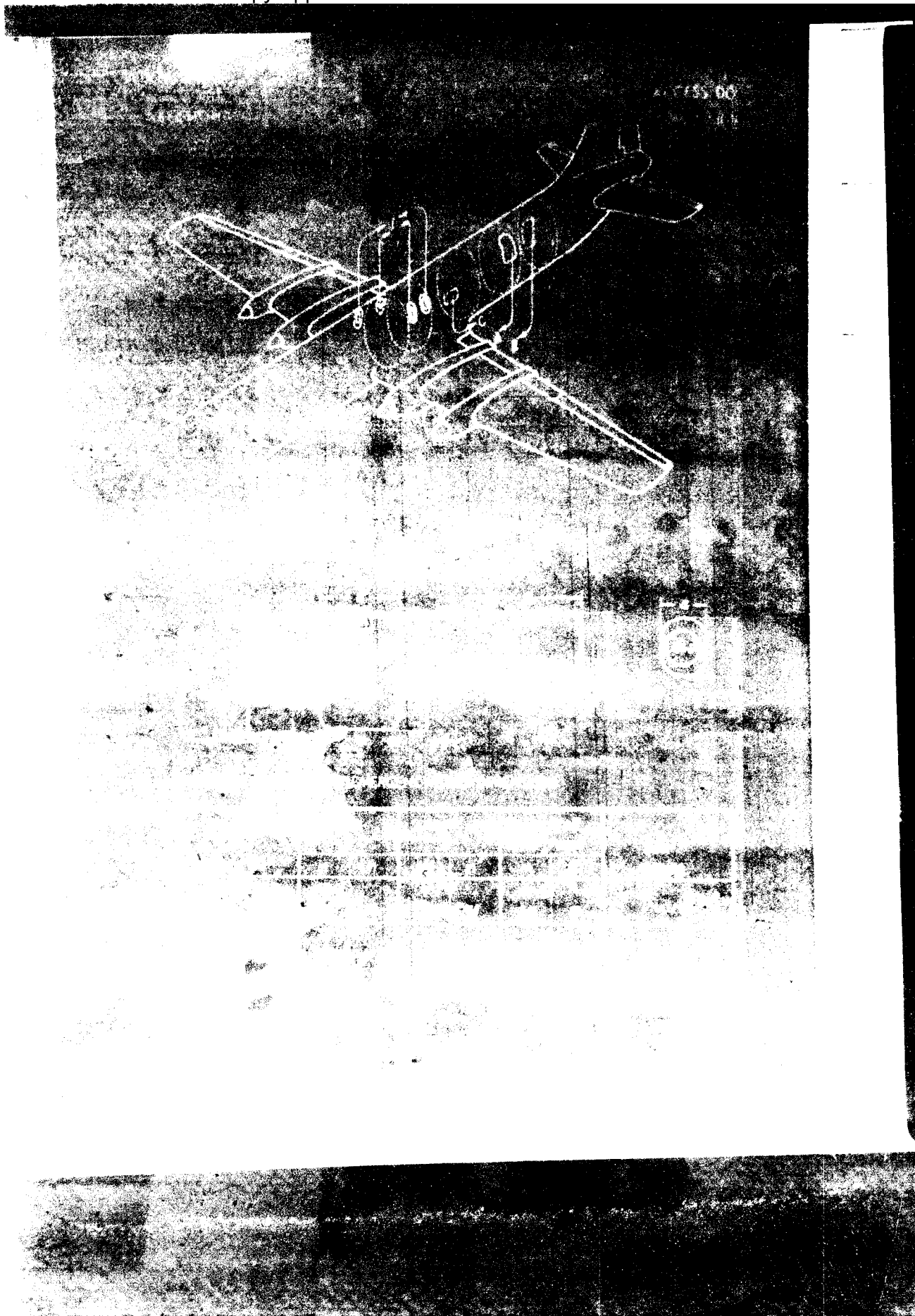
UNDERLOAD PRESSURIZED FREIGHT HOLD DIMENSIONS

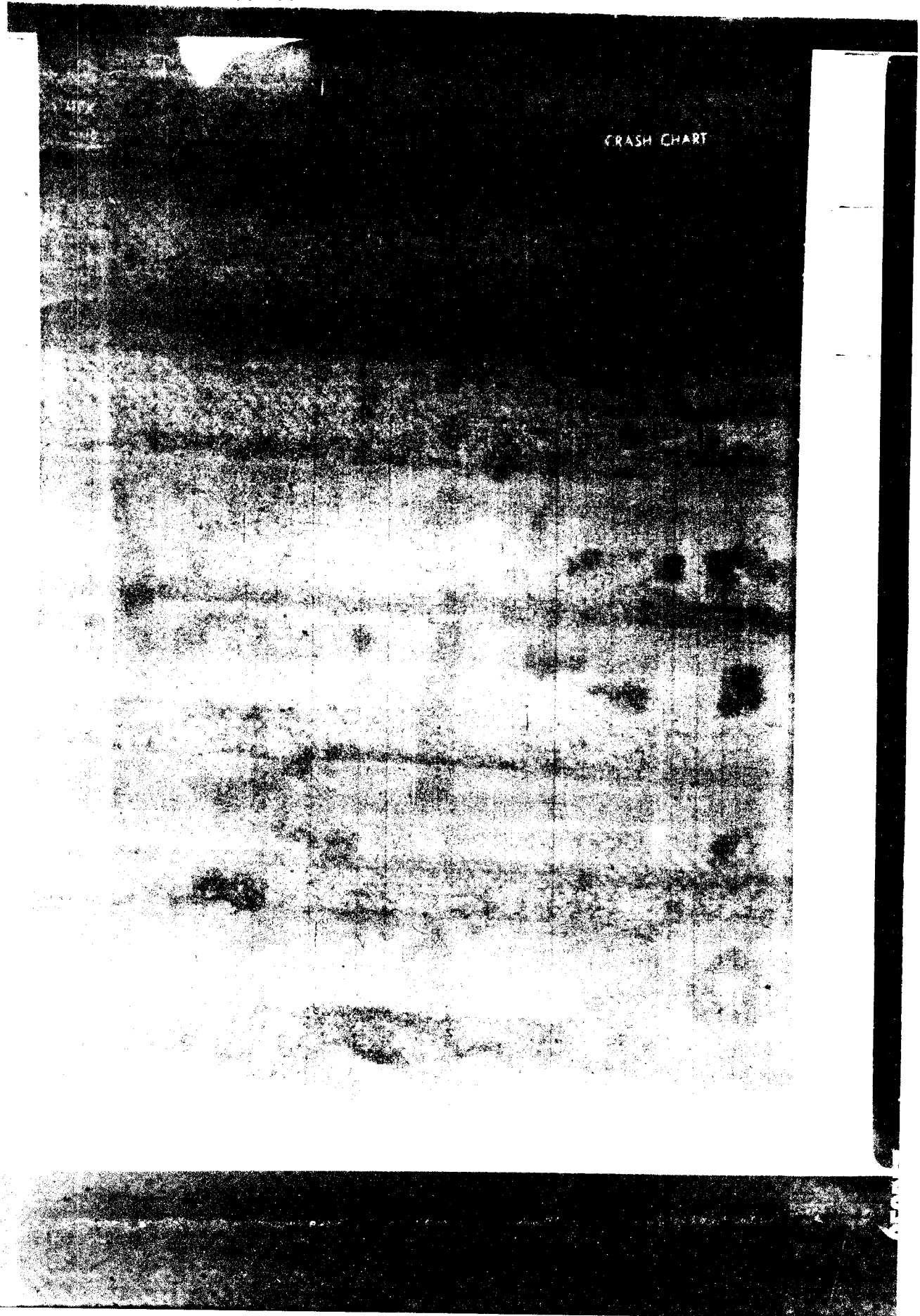
Freight hold no.	width		height		length		floor area		floor stressed		usable volume	
	a	a <sub>1</sub>	b	b <sub>1</sub>	c	c <sub>1</sub>	sq. m	sq. ft.	kg./sq. m	lb./sq. ft.	cu. m	cu. ft.
1	1.50	50	1.00	33	8.815	28 3/4	6.82	73.3	360	72	6.52	24.38
2	1.50	50	1.00	23	4.608	14 3/4	7.03	75.9	390	72	7.03	25.77
3	1.50	50	1.00	38	4.867	15 1/2	7.59	82.6	350	72	7.30	26.52
4	1.50	50	1.00	28	4.705	14 1/2	8.10	87.2	300	72	7.40	26.80



UNDERLOAD NON-PRESSURIZED FREIGHT HOLDS DIMENSIONS

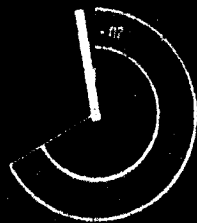
Freight hold no.	width		height		length		floor area		floor stressed		usable volume	
	a	a <sub>1</sub>	b	b <sub>1</sub>	c	c <sub>1</sub>	sq. m	sq. ft.	kg./sq. m	lb./sq. ft.	cu. m	cu. ft.
1	1.50	50	1.00	30	8.815	28 3/4	6.82	73.3	360	72	6.52	24.38





- 1. AIRCRAFT
- 2. AIRCRAFT POWER UNIT (APU)
- 3. FUEL TRUCKS
- 4. AIR CONDITIONING UNIT
- 5. FIREGUARD EQUIPMENT
- 6. LAVATORY SERVICE CART
- 7. CABIN CLEANING CART
- 8. MAINTENANCE CART
- 9. BAGGAGE CARTS
- 10. CATERING SERVICE CART
- 11. RAMP SUPERINTENDANT

10-10



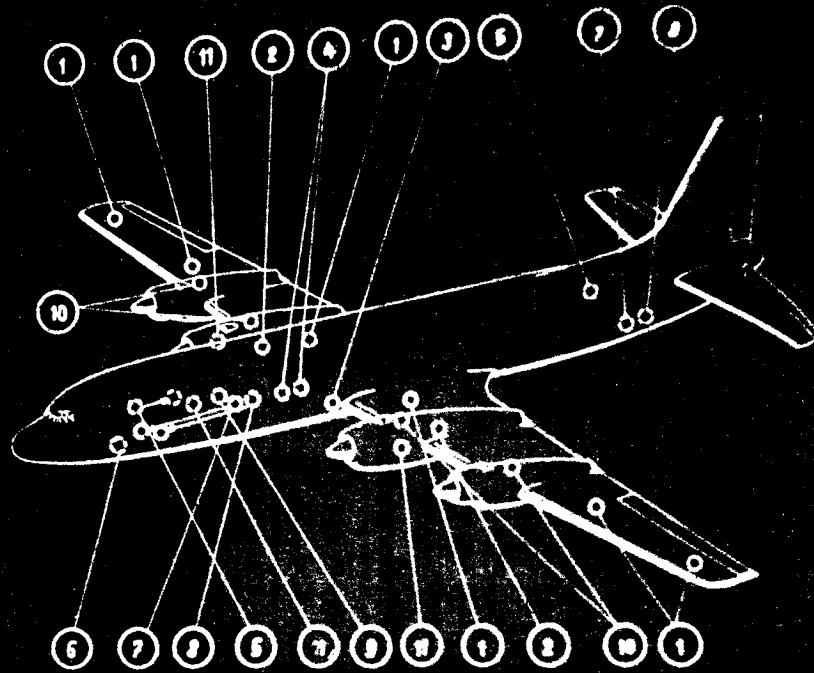
POSITIONING OF SERVICE EQUIPMENT

Equipment should be positioned in the area of the aircraft  
 ramp in the following order: 1. Fuel trucks, 2. Air conditioning  
 units, 3. Fireguard equipment, 4. Baggage carts, 5. Catering  
 service carts, 6. Maintenance carts, 7. Cabin cleaning carts,  
 8. Lavatory service carts, 9. Air conditioning units, 10. Fuel  
 trucks, 11. Ramp superintendent.

When aircraft  
landing out

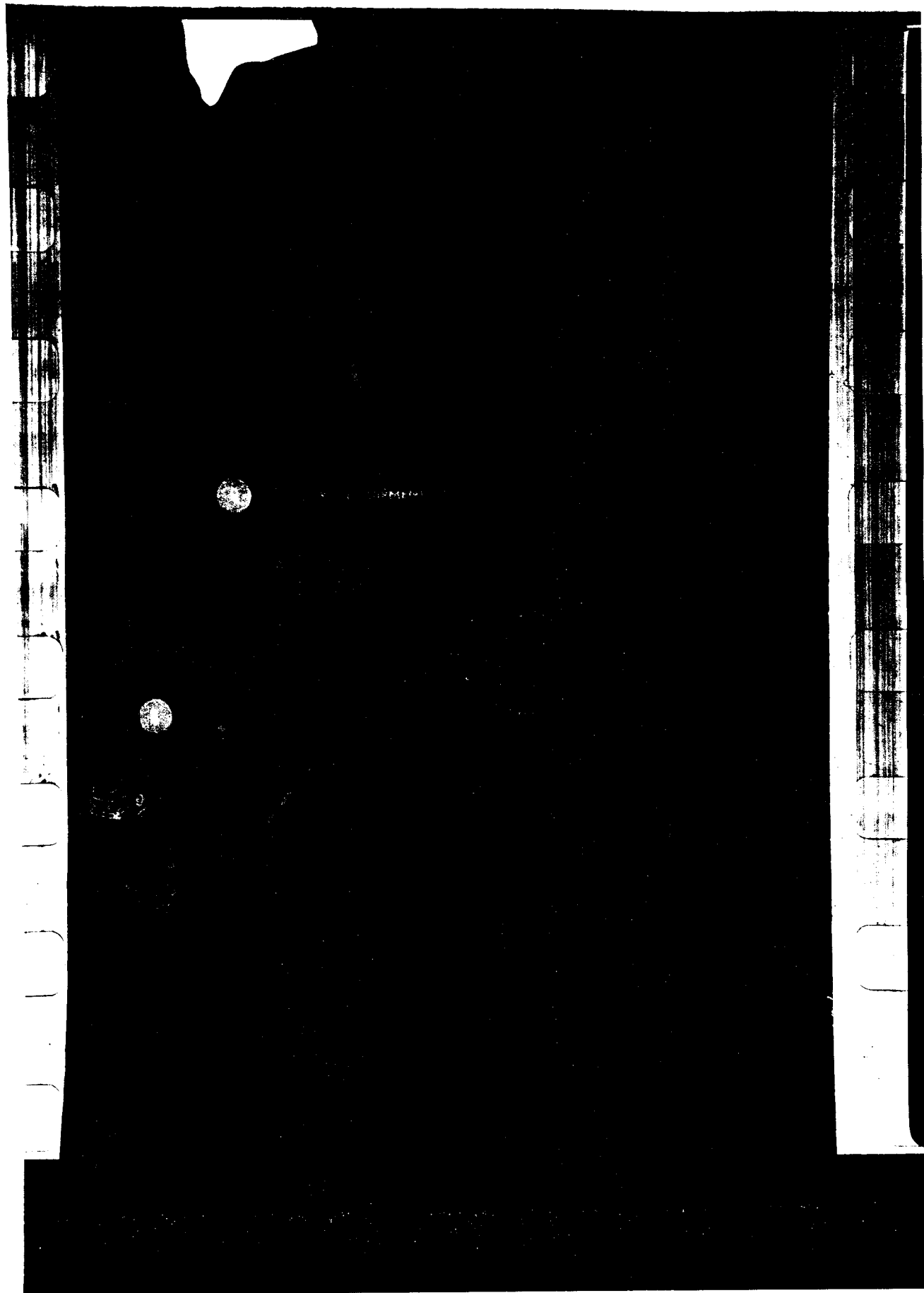


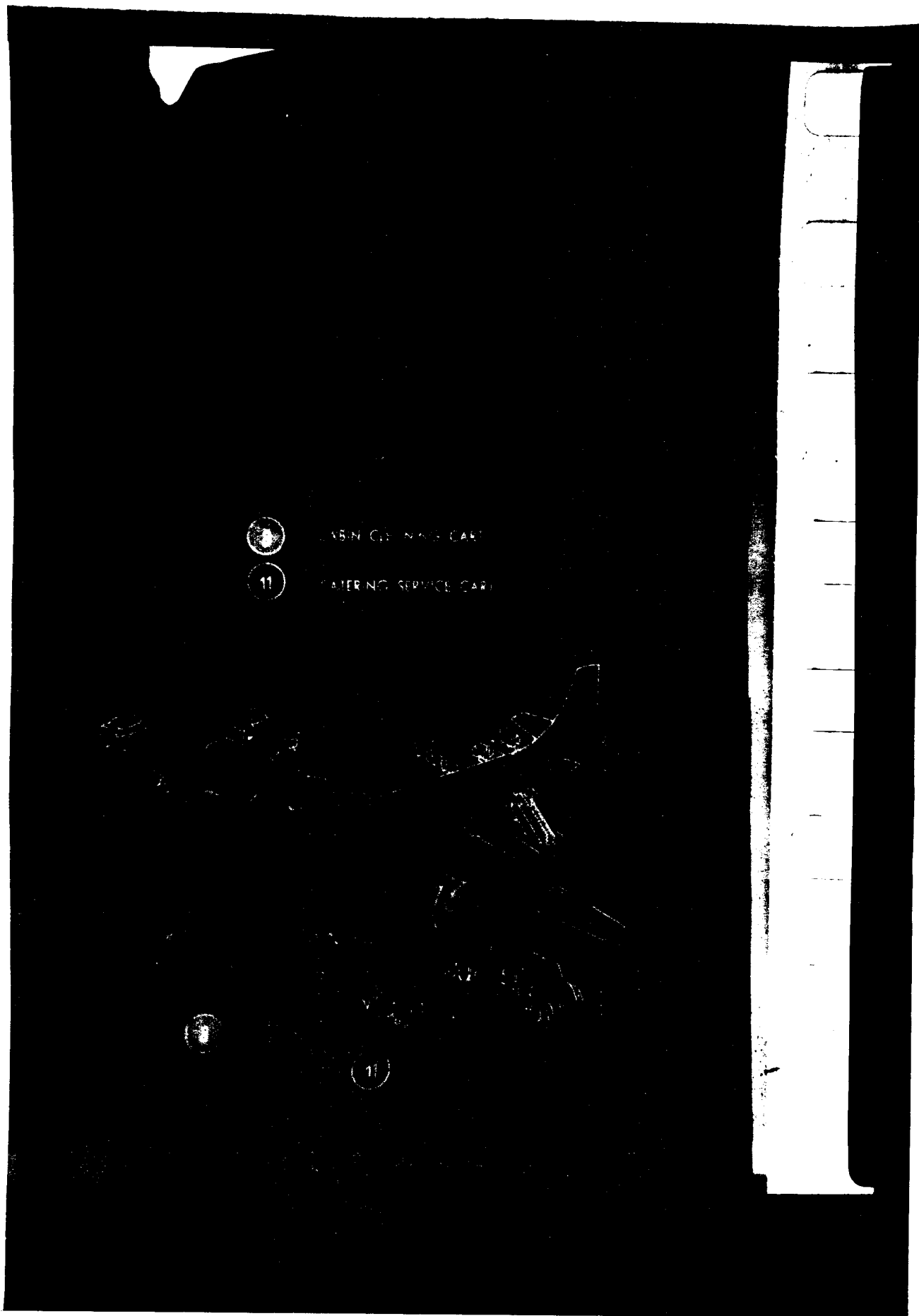
SECTION II

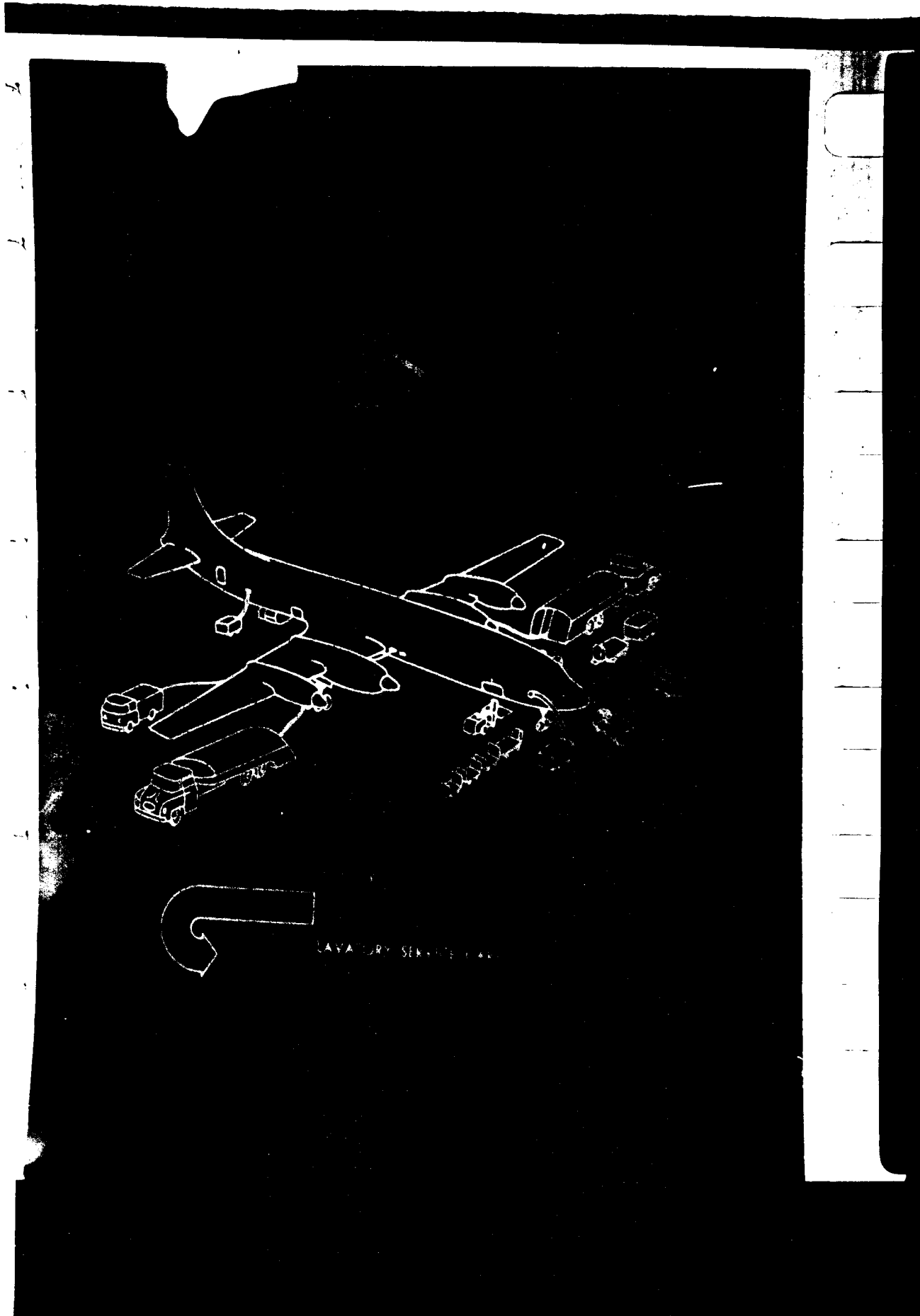


- No
- 1 Gravity fuel filling fillers
  - 2 Pressure refuelling connections
  - 3 DC power supply point
  - 4 Ground AC power supply receptacles
  - 5 Airconditioning unit connection
  - 6 Charging nitrogen connection
  - 7 Servicing water connection
  - 8 Toilet filling and draining coupling
  - 9 Charging oxygen connection
  - 10 Engine oil fillers
  - 11 Refilling hydraulic oil
- <sup>11-18</sup> Changed with the IL-18 B type

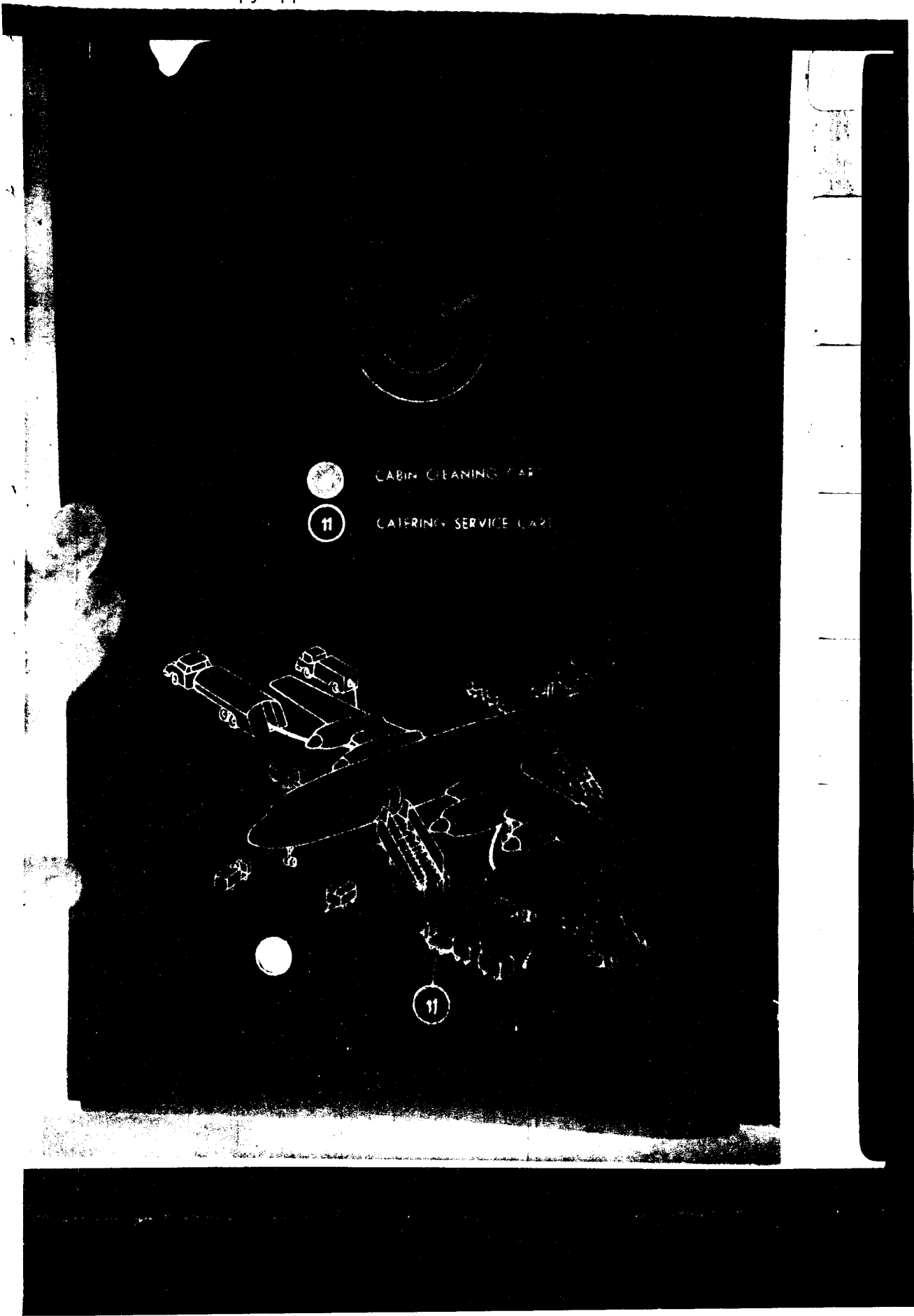


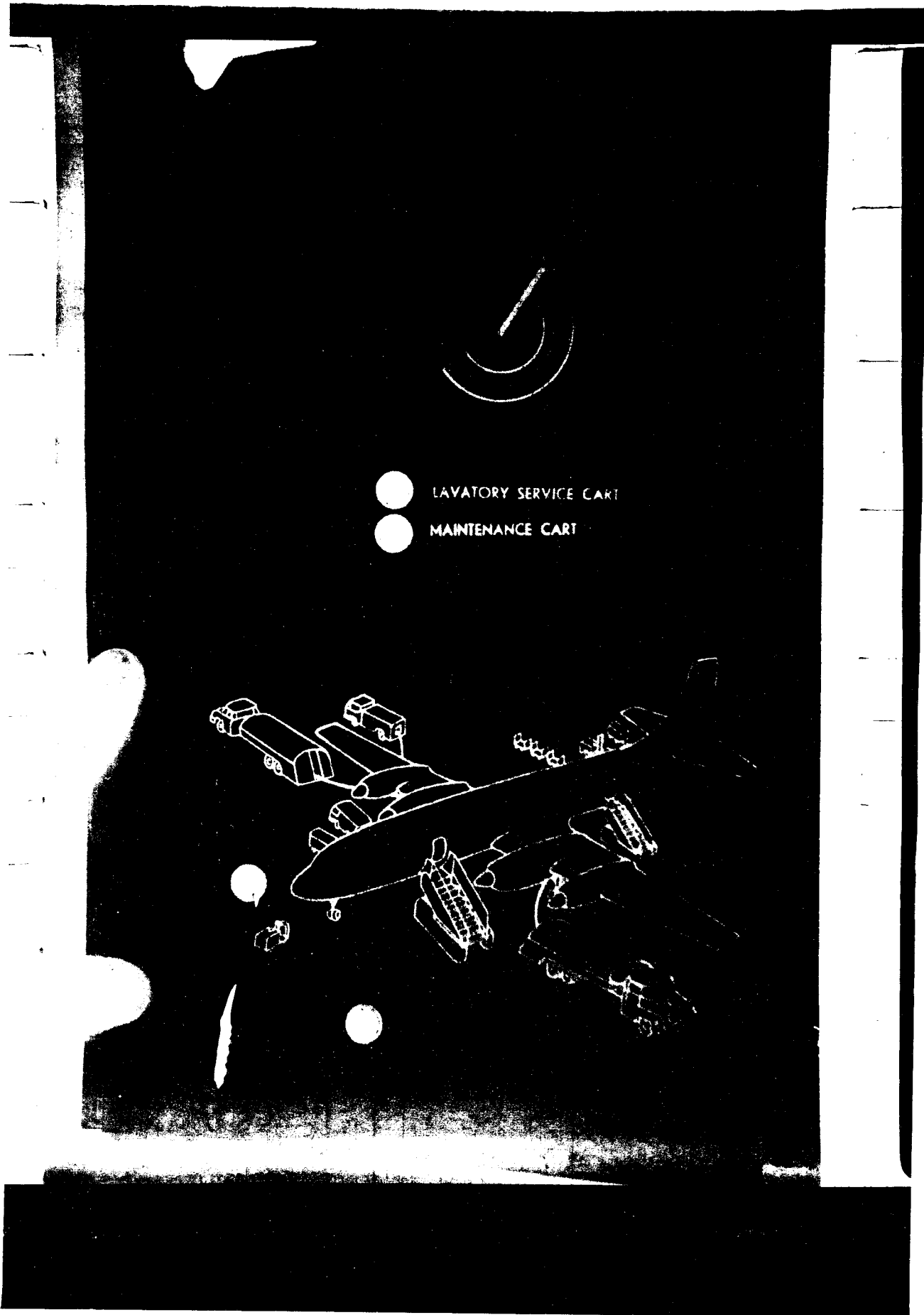














DETAIL PROCEDURES

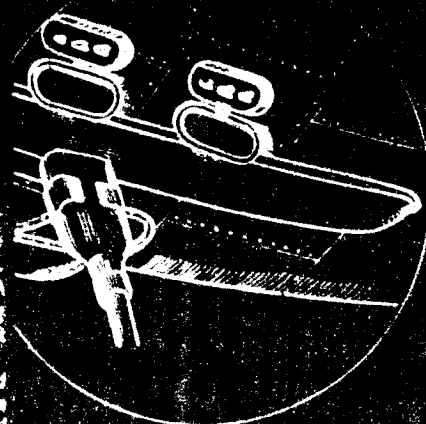


GROUND POWER UNIT

Two ground power unit receptacles, located on the lower starboard centre wing section of the fuselage provide for connection of the ground power units rated at 28 V, 1200 A.

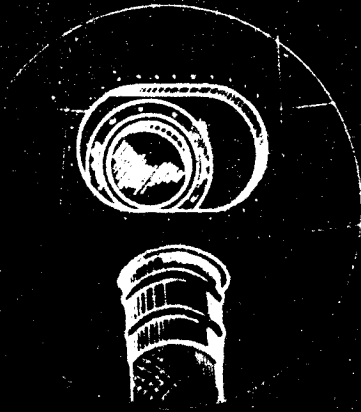
In case that the ground power units used have unequal ratings, the higher rating unit should be connected to the rear ground power unit receptacle. A ground power unit rated at 28 V, 600 A continuously is capable of handling any standing load of the aircraft electrical system.

Two ground power units are required for engine starting only. Hence, the second unit may be switched ON before engine starting.



AIRCONDITIONING UNIT

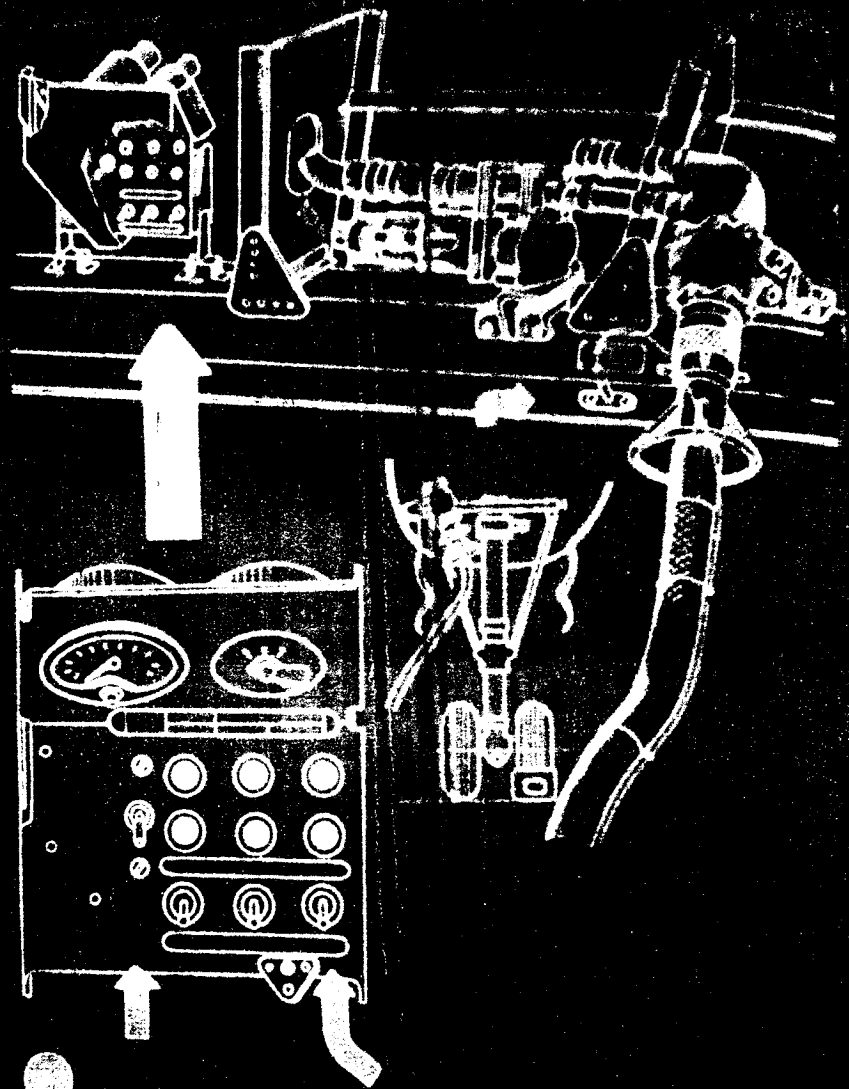
Two couplings, located on the front and rear starboard side of the fuselage provide for connection of the airconditioning units.



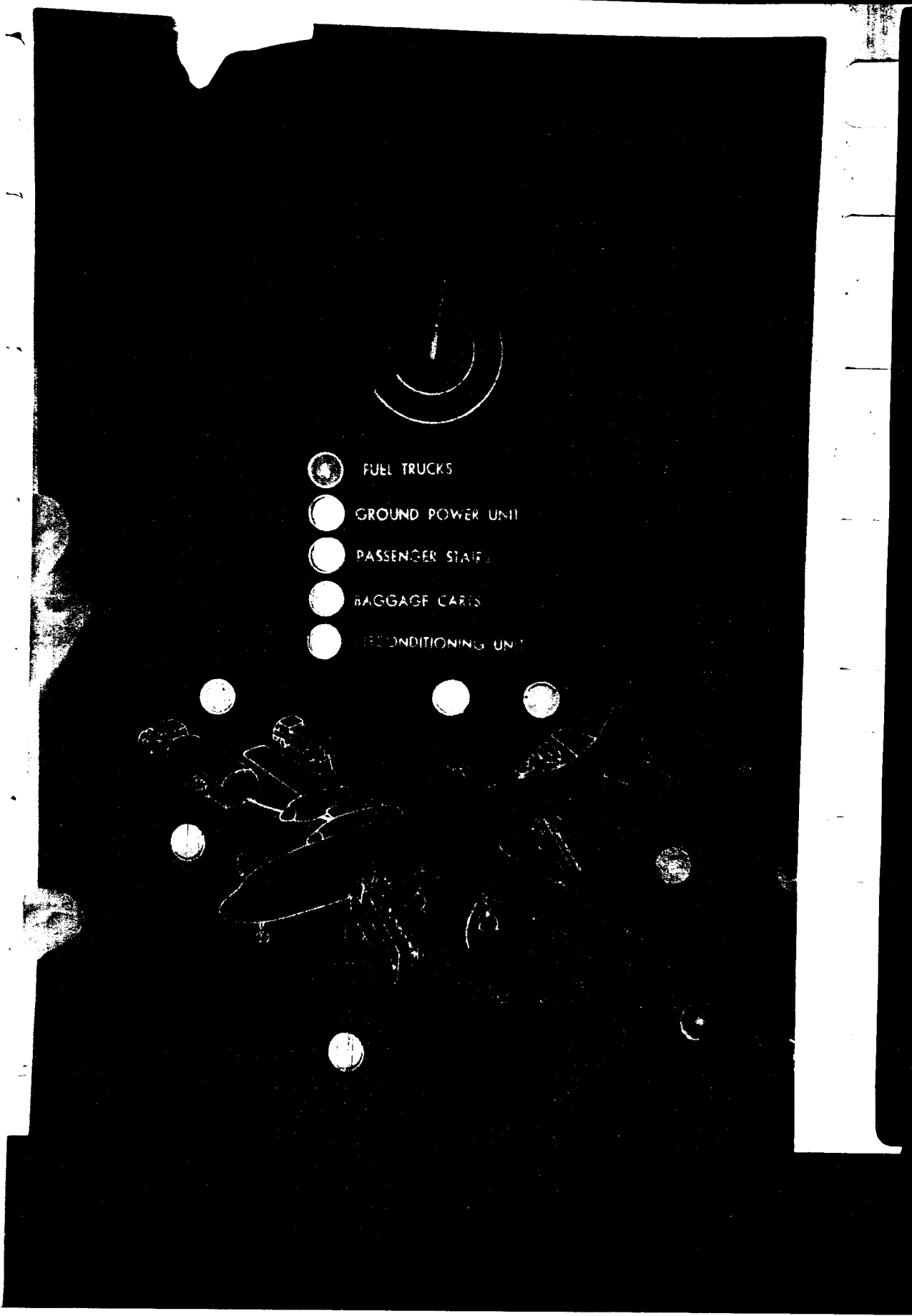
PASSENGER STAIRS

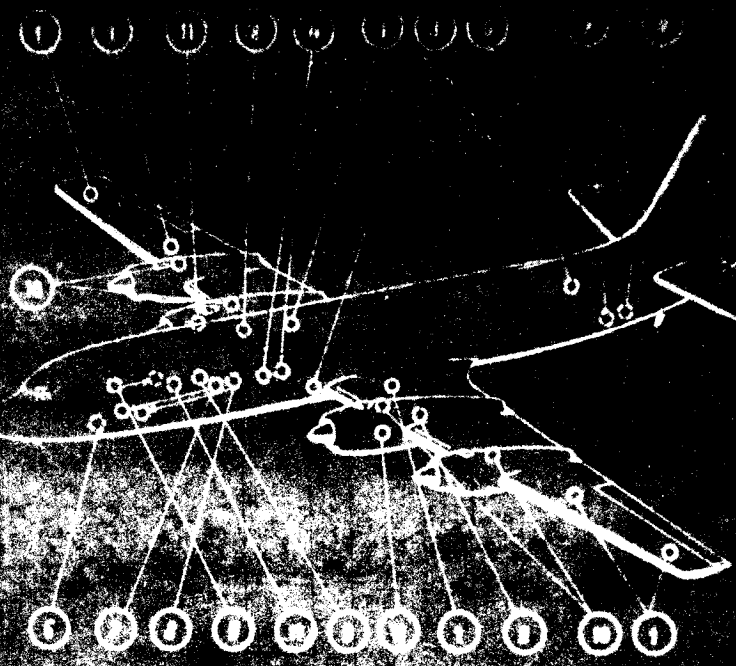
Passenger stairs should be moved into their positions immediately after all engines are completely stopped. The height of the stairs platform should be 3.1 m (10 ft 2 in) above the ground.

LISTEN PROCEDURES



**● PRESSURE UNDERWING REFUELING**  
 Switch to UP position (red bulbs light)  
 Prior to pressure refueling make sure the ground support equipment is properly connected to the fuel receptacle.  
 By switching the switches of the selected tanks to the UP position, the fuel pumps will start. By use of the fuel gauge check the fuel flow. When the fuel gauge bulb lights the refueling is completed and the switches should be returned to the 0/WP position and the fuel tanks should be checked. As soon as the tanks of the fuel tanks are checked a change should be made to the 0/WP position.





- No.
- 1 Ground fuel filter drain
  - 2 Fuel filter drain connection
  - 3 DC power supply panel
  - 4 Ground AC power supply receptacles
  - 5 Airconditioning unit connection
  - 6 Chemical oxygen connection
  - 7 Fuel filter drain connection
  - 8 Tank filler drain connection
  - 9 Ground AC power supply receptacles
  - 10 Ground AC power supply receptacles
  - 11 Fuel filter drain connection
  - 12 Fuel filter drain connection