

Declassified E.O. 12356 Section 3.3/NND No.

785017

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10000/135/486

10000/135/486

IAF, TARGET TOWING
DEC. 1944; FEB. 1946 - MAR. 1947

BALTIMORETITLE

Installation of Target Towing apparatus with Triple Drum Winch Type E.

DESCRIPTION

This modification provides for the installation of standard type target towing apparatus with a motorised triple drum winch Type "E".

SEQUENCE OF OPERATION

1. Obtain or manufacture Items No;1 to 22 as shown in Drgs. No. 203G/207, Sheets 1 to 4.
2. Remove the I.T.F. bracket situated on the starboard side of the fuselage between the rear turret armour plate and the former at Station 332.5/8.
3. Remove the lower swivel gun mountings, ammunition boxes, rear floorboards, armour plate and the two rear fixed mounting brackets.
4. Remove the rear turret and ammunition boxes and the rear door latch socket.
5. Position and fit Floor Beams (Det.No.15) using eight 1/4" B.S.F. x 0.8" M.S. bolts and Simmonds nuts for securing to the rear hatch lock casting as shown in Drg.No. 203G/207 Sheet 1.
6. Secure Strengthening Cable Brackets (Det. No;13) to floor beams using six 1/4" B.S.F. x 0.8" M.S. bolts and Simmonds nuts as shown, after cutting suitable slots in the fuselage skin.
7. Position and fit Pulley Assembly (Det. No.16) using six 1/4" B.S.F. x 0.8" M.S. bolts and Simmonds nuts as shown, removing any rivets which prevent a flush fit and utilizing the holes left to secure the pulley brackets to the fuselage.
8. Position and fit Strengthening Cables (Det.No. 14A) using eight 1/4" B.S.F. x 0.8" M.S. bolts and Simmonds nuts as shown.
9. Remove and modify the rear escape hatch door as shown in Drg. No. 203G/207, Sheet 2/
10. Build up the main winch mounting as shown in Drg.No. 203G/207, Sheet 1 and position on the rear fixed gun mounting brackets, after removing four 1/4" diam. bolts utilising the holes left and drilling four additional 1/4" diam. holes to secure the mounting, using eight 1/4" B.S.F. x 0.8" M.S. bolts and Simmonds nuts.

Fit the escape hatch (Det. No. 14) to the mounting.

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1. Obtain or manufacture Items No. 1 to 22 as shown in Drgs. No. 203G/207, Sheets 1 to 4.
2. Remove the I.T.T. bracket situated on the starboard side of the fuselage between the rear turret armour plate and the former at Station 332.5/8.
3. Remove the lower swivel gun mountings, ammunition boxes, rear floorboards, armour plate and the two rear fixed mounting brackets.
4. Remove the rear turret and ammunition boxes and the rear door latch socket.
5. Position and fit Floor Beams (Det. No. 15) using eight 1/4" B.S.F. x 0.8" M.S. bolts and Simmonds nuts for securing to the rear hatch lock casting as shown in Drg. No. 203G/207 Sheet 1.
6. Secure Strengthening Cable Brackets (Det. No. 13) to floor beams using six 1/4" B.S.F. x 0.8" M.S. bolts and Simmonds nuts as shown, after cutting suitable slots in the fuselage skin.
7. Position and fit Pulley Assembly (Det. No. 16) using six 1/4" B.S.F. x 0.8" M.S. bolts and Simmonds nuts as shown, removing any rivets which prevent a flush fit and utilizing the holes left to secure the pulley brackets to the fuselage.
8. Position and fit Strengthening Cables (Det. No. 14A) using eight 1/4" B.S.F. x 0.8" M.S. bolts and Simmonds nuts as shown.
9. Remove and modify the rear escape hatch door as shown in Drg. No. 203G/207, Sheet 2/
10. Build up the main winch mounting as shown in Drg. No. 203G/207, Sheet 1 and position on the rear fixed gun mounting brackets, after removing four 1/4" diam. bolts utilising the holes left and drilling four additional 1/4" diam. holes to secure the mounting, using eight 1/4" B.S.F. x 0.8" M.S. bolts and Simmonds nuts.
11. Secure Front Cross Tie (Det. No. 7) to the mounting and to each side of the formers at Station 332.5/8 using four 1/4" B.S.F. x 0.8" M.S. bolts and Simmonds nuts, the former being stiffened by means of hard wood inserts as shown in Drg. No. 203G/207, Sheet 1.
12. Fit hard wood inserts to stiffen the channel sections at position which is the rear support of the gun mounting brackets.

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13. Secure Stanchions (Det. No.10) to the front cross tie and to the gun mounting brackets using two 1/4" B.S.F. x 0.8" M.S. bolts and Simmonds nuts and eight 2 B.A. x 0.8" M.S. bolts and Simmonds nuts, utilizing four existing holes in gun mounting brackets.
14. Secure Angle Braces (Det. No.11) to the Stanchions and floor beams using four 1/4" B.S.F. x 0.8" M.S. bolts and Simmonds nuts.
15. Secure the winch, with the motor rear most, to the mounting using four 5/16 B.S.F. x 0.8" M.S. bolts and Simmonds nuts so that the cable from the drums to the pulley clears the mounting by at least 1/2in. Refit the rear escape hatch door.
16. Fit the ballast weight mounting to the forward floor board using four 1/4" B.S.F. x 0.8" M.S. bolts and Simmonds nuts as shown in Drg. No. 203G/207, Sheet 1 and refit the floor board.
17. Fit suitable floor boards over the floor beams in front of the rear hatch and secure to the floor beams using approximately twenty 2 B.A. x 1.8" M.S. bolts and Simmonds nuts.
18. Fit the drogue stowages at positions as shown or any other convenient positions.
19. Fit a locking device to prevent the rear door opening in flight, consisting of a short cable or chain attached to the former at Station 306.3/4 with a ring at the free end to fit over the rear door winding handle; any suitable alternative locking device may be used.
20. Secure Tail Plane Safety Wire Wing Tip Brackets (Det.No;20) to the tail plane using approximately sixty 1/8"D. x 3/16". chobert rivets.
21. Secure Under Tail Safety Wire Bracket (Det;No;21) to the fuselage using eight 4 B.A. x 0.4" M.S. bolt and Simmonds nuts, incorporating a stiffening plate on the inside of the fuselage as shown in Drg. No. 203G/207, Sheet 2.
22. Secure safety Wire Pin Attachment Bracket (Det. No.22) to the fin using three 2 B.A. x 0.8" M.S. bolt and Simmonds nuts.
23. Fit 5 cwt. steel cable as safety wire using turnbuckles at the fin attachment.
24. Fit Control Panel (Det. No.18) on the port side of the aircraft between the formers at Station 319.11/16" and 332.5/8 and between stringers 10 and 11, inserting a wooden packing piece at the forward Station to

16. mounting using four 3/16 B.S.F. x 0.8" M.S. bolts and Simmonds nuts so that the cable from the drums to the pulley clears the mounting by at least 1/2 in.
17. Refit the rear escape hatch door.
Fit the ballast weight mounting to the forward floor board using four 1/4" B.S.F. x 0.8" M.S. bolts and Simmonds nuts as shown in Drg. No. 203G/207, Sheet 1 and refit the floor board.
18. Fit suitable floor boards over the floor beams in front of the rear hatch and secure to the floor beams using approximately twenty 2 B.A. x 1.8" M.S. bolts and Simmonds nuts.
19. Fit the drogue stowages at positions as shown or any other convenient positions.
20. Fit a locking device to prevent the rear door opening in flight, consisting of a short cable or chain attached to the former at Station 306.3/4 with a ring at the free end to fit over the rear door winding handle; any suitable alternative locking device may be used.
21. Secure Tail Plane Safety Wire Wing Tip Brackets (Det;No;20) to the tail plane using approximately sixty 1/8"D. x 3/16" chobert rivets.
22. Secure Under Tail Safety Wire Bracket (Det;No;21) to the fuselage using eight 4 B.A. x 0.4" M.S. bolt and Simmonds nuts, incorporating a stiffening plate on the inside of the fuselage as shown in Drg. No. 203G/207, Sheet 2.
23. Secure safety Wire Fin Attachment Bracket (Det. No.22) to the fin using three 2 B.A. x 0.8" M.S. bolt and Simmonds nuts.
24. Fit 5 cwt. steel cable as safety wire using turnbuckles at the fin attachment.
25. Fit Control Panel (Det. No.18) on the port side of the aircraft between the formers at Station 319.11/16" and 332.5/8 and between stringers 10 and 11, inserting a wooden packing piece at the forward Station to ensure that the panel is level.
26. Fit a 100 amp. circuit breaker adjacent to circuit breakers Nos. 230 and 228 on the generator control panel assembly situated on the port side of the aircraft opposite the W/OP's position.
27. Link the positive sides of the three circuit breakers by a copper strip.

NOTE - The positive feed for the circuit breaker is cable No. 807.

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28.

Connect a No.4 A.W.G. cable from the dead side of the 100 Amp. circuit breakers and route it to the gun selector switch box, either through the conduit linking the generator control panel assembly with the gun selector switch box, or cleating it externally to the conduit.

29.

Pass the No. 4 A.W.G. cable through the lower side of the gun selector switch box and connect the free end to the relay.

NOTE - The switch on the panel for operating the winch motor is wired in series with the push button, the latter being used for "inching" at the last stages of winding the cable on the drum.

30.

Carry out a functioning test on the installation.

NOTE - Paras. 26) to 29 inclusive do not apply to

Mark III A aircraft with serial numbers FA 200 to FA 674 inclusive. The 100 amp. circuit breaker and No.4 A.W.G. cable are already fitted on these aircraft, the former situated adjacent to the control panel fitted in para 25, and the latter being cable No.819, which emerges from the gun selector switch box.

30.

Carry out a functioning test on the installation.

NOTE

- Paras. 26) to 29 inclusive do not apply to Mark III A aircraft with serial numbers FA 200 to FA 674 inclusive. The 100 amp.

circuit breaker and No.4 A.W.G. cable are already fitted on these aircraft, the former situated adjacent to the control panel fitted in para 25, and the latter being cable No.819, which emerges from the gun selector switch box.

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MATERIAL REQUIREDI (A) MODIFICATION SET COMPRISING

<u>DET. NO.</u>	<u>SHEET NO.</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
1	3	Top Front and Rear Bearers	2
2	3	Front Angle Posts	2
3	3	Rear Angle Posts	2
4	3	Ties to the Side Elevation	2
5	3	Rear Cross Tie	1
6	3	Rear Tie	1
7	3	Front Cross Tie	1
8	3	Angle Bearers	2
9	3	Strips	2
10	3	Stanchions	2
11	3	Angle Braces	2
12	3	Bracket to Support Motor	1
12A	3	Angle Beams	2
13	4	Strengthening Cable Brackets	2
14	4	Attachment Lugs	8
14A	4	Strengthening Cables	2
15	4	Floor Beams	2
15A	4	Packing Pieces	2
16	4	Pulley Assembly	1
17	4	Strips to Drogue Rack	4
18	4	Control Panel for Motor	1
19	4	Stiffening Bar	1
20	2	Under Tail Safety Wire Bracket	1
21	2	Safety Wire Pin Attachment Bracket	1
22	2	Tail Plane Safety Wire Wing Tip Brackets	1

I (B) ADDITIONAL ITEMS REQUIRED

<u>REF. NO.</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
9A/1309	Gear, target towing, m.g. Type E triple drum gear, motorised, 24 volt, Mark I	1
137F/51	Relay	1
5C/540	Button, push, double pole, Type B Switch	1
5C/146	Grommets, rubber, 1/4" i.d.	1
128/AN932 -4-7	Steel, carbon, sheet, 14 S.W.G.	3
30A/2499	Dural, sheet, 18 S.W.G.	12" x 18"
30F/220	Canvas, duck, white, 36"	2" x 8"
32B/106		3'0"

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8	Strips	2
9	Stanchions	2
10	Angle Braces	2
11	Bracket to Support Motor	1
12	Angle Beams	2
12A	Strengthening Cable Brackets	2
13	Attachment Lugs	8
14	Strengthening Cables	2
14A	Floor Beams	2
15	Packing Pieces	2
15A	Pulley Assembly	1
16	Strips to Drogue Back	4
17	Control Panel for Motor	1
18	Stiffening Bar	1
19	Under Tail Safety Wire Bracket	1
20	Safety Wire Pin Attachment	1
21	Bracket	1
22	Tail Plane Safety Wire	1
	Wing Tip Brackets	1

I (B) ADDITIONAL ITEMS REQUIRED

QTY.

DESCRIPTION

REF.NO.

9A/1309	Gear, target towing, M.S. Type E triple drum gear, motorised, 24 volt, Mark I	1
137F/51	Relay	1
5C/540	Button, push, double pole, Type B	1
5C/146	Switch	1
128/AN932 -4-7	Grommets, rubber, 1/4" i.d.	3
30A/2499	Steel, carbon, sheet, 14 S.W.G.	12" x 18"
30F/220	Dural, sheet, 18 S.W.G.	2" x 8"
32B/106	Canvas, duck, white, 36"	3'0"
28D/21	Bolts, M.S., Hx. hd., 5/16" B.S.F. x 0.8" long	4
28D/19	Bolts, M.S., Hx. hd., 1/4" B.S.F. x 0.8" long	50
28D/18	Bolts M.S. Hx. hd., 2 B.A. x 8" long	18
28D/72	Bolts, M.S., Hx. hd., 2 B.A. x 1.8" long	20
28D/3	Bolts, M.S., Hx. hd., 4 B.A. x 0.4" long	8

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REF. NO.	DESCRIPTION	QTY.
28M/5849	Nuts, M.S. Simmonds 5/16" B.S.F.	4
28M/5848	Nuts, M.S. Simmonds 1/4" B.S.F.	50
28M/5847	Nuts, M.S. Simmonds 2 B.A.	30
28M/5846	Nuts, M.S. Simmonds 4 B.A.	8
28W/3073	Washers, steel, 0.32" i.d. x 0.75" o.d.	8
28W/3072	Washers, steel, 0.26" i.d. x 0.60" o.d.	100
28W/3071	Washers, steel, 0.19" i.d. x 0.50" o.d.	36
28W/3070	Washers, steel, 0.15" i.d. x 0.40" o.d.	16
28W/3081	Washers, steel, special, 0.19" i.d. x 1.25" o.d.	20
28Q/6649	Rivets, chobert, L.A., C/sk. hd., 1/8" d. x 3/16" long.	60
28U/3012	Turnbuckles, two eye ends, 4 B.A.	2
28X3495	Wire, steel, extra flexible, 5cwt.	46'0"
10B/260	Chain, Victor	10'0"

28W/3081	Washers, steel, special, 0.19" i.d. x 1.25" o.d.	20
28Q/6649	Rivets, chobert, L.A., C/sk. hd., 1/8" d. x 3/16" long.	60
28U/3012	Turnbuckles, two eye ends, 4 B.A.	2
28X3495	Wire, steel, extra flexible, 5cwt.	46'0"
10B/260	Chain, Victor	10'0"

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II MATERIAL REQUIRED FOR MODIFICATION SET AS AT (A) ABOVE

<u>Det.No.</u>	<u>Ref.No.</u>	<u>Description</u>	<u>Qty.</u>
1	30A/1233	Steel, angle, 1.1/4" x 1.1/4" x 1/4"	5'0"
2	30A/1233	Steel, angle 1.1/4" x 1.1/4" x 1/4"	3'9"
3	30A/1233	Steel, angle, 1.1/4" x 1.1/4" x 1/4"	3'9"
4	30A/505	M.S., strip 1/8" x 1"	4'4"
5	30A/505	M.S., strip 1/8" x 1"	2'10"
6	30A/2420	M.S., strip 1.1/4" x 3/16"	2'6"
7	30A/1233	Steel, angle, 1.1/4" x 1.1/4" x 1/4"	3'8"
8	30A/1233	Steel, angle, 1.1/4" x 1.1/4" x 1/4"	2'8"
9	30A/2420	M.S. strip, 1/1/4" x 3/16"	2'6"
10	30A/1233	Steel, angle, 1.1/4" x 1.1/4" x 1/4"	4'3"
	30A/538	M.S. sheet 10 S.W.G.	7" x 4.1/4"
11	30A/1233	Steel, angle, 1.1/4" x 1.1/4" x 1/4"	4'0"
12	30A/538	M.S. sheet, 10 S.W.G.	5.1/4" x 5.3/4"
12A	30A/1233	Steel, angle, 1.1/4" x 1.1/4" x 1/4"	4'4"
13	30A/330	M.S. flat, 3"x 1/4"	1'1"
14	30A/501	M.S., strip, 1/8" x 3/4"	1'2"
14A	28X/3450	Wire, steel, extra flexible 25cwt 4'4"	
	28U/3018	Turnbuckles, two eye ends, 5/16" B.S.P.	2
15	30A/1233	Steel, angle, 1.1/4" x 1.1/4" x 1/4"	4'3"
15A	30A/295	M.S., flat, 1.1/8" x 1/2"	6"
16	9A/789	Gear, target towing, e.s. Type B Pulley, main, swivelling	1
	30A/483	M.S., square, 1.1/2"	1.3/4"
	30A/2420	M.S., strip, 1.1/4" x 3/16"	1'3"
	30A/1253	Steel, plate 1/4"	1'0" x 1'0"
	31A/3	Ash, 2"	2"x4"
	30A/397	M.S., round, 3/16" d.	1'7"
	28M/767	Nuts, M.S., slotted, 2 B.A.	360
	28P/5000	Pins, split M.S., 1/32" d. x 1/2" long	40
17	30B/219	Dural, sheet 16 S.W.G.	10

6	30A/2420	M.S., strip 1.1/4" x 3/16"	2'10"
7	30A/1233	Steel, angle, 1.1/4" x 1.1/4"	2'6"
8	30A/1233	Steel, angle, 1.1/4" x 1.1/4"	3'8"
9	30A/2420	M.S. strip, 1.1/4" x 3/16"	2'8"
10	30A/1233	Steel, angle, 1.1/4" x 1.1/4"	2'6"
	30A/538	M.S. sheet 10 S.W.G.	4'3"
			7" x 4"
11	30A/1233	Steel, angle, 1.1/4" x 1.1/4"	1'4"
12	30A/538	M.S. sheet, 10 S.W.G.	4'0"
12A	30A/1233	Steel, angle, 1.1/4" x 1.1/4"	5.1/4"
			x 5.3/4"
13	30A/330	M.S. flat, 3"x 1/4"	4' 4"
14	30A/501	M.S. strip, 1/8" x 3/4"	1'1"
14A	28X/3450	Wire, steel, extra flexible 25cwt	1'2"
	28U/3018	Turnbuckles, two eye ends,	4'4"
		5/16" B.S.F.	2
15	30A/1233	Steel, angle, 1.1/4" x 1.1/4"	4'3"
		x 1/4"	6"
15A	30A/295	M.S., flat, 1.1/8" x 1/2"	1
16	9A/789	Gear, target towing, e.a. Type B	1.3/4"
		Fulley, main, swivelling	1'3"
	30A/483	M.S., square, 1.1/2"	1'0" x
	30A/2420	M.S., strip, 1.1/4" x 3/16"	1'0"
	30A/1253	Steel, plate 1/4"	2"x4"
			1'7"
	31A/3	Ash, 2"	36U40
	30A/397	M.S., round, 3/16" d.	10
	28M/767	Nuts, M.S., slotted, 2 B.A.	6"x1'5"
	28P/5000	Pins, split M.S., 1/32" d. x	7.1/4"
		1/2" long	x14"
17	30B/219	Dural, sheet, 16 S.W.G.	1'1"
18	30B/220	Dural, sheet, 18 S.W.G.	
19	30A/2383	Steel, non shrink, flat,	
		3/4" x 3/16"	

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<u>Det. No.</u>	<u>Ref. No.</u>	<u>Description</u>	<u>Qty.</u>
20	30A/836	Steel, tubing, round, 1/2" d. x 20 S.W.G.	5'6"
	30A/845	Steel, tubing, round, 7/8" d. x 20 S.W.G.	6"
	30B/507	Dural, bar, round, 2"d.	7"
	30B/218	Dural, sheet, 14 S.W.G.	3.1/2" x 1'2"
	30A/542	M.S., sheet, 14 S.W.G.	2" x 3"
	28D/72	Bolts, M.S., hd., 2 B.A. x 1.8" long	4
	28M/5851	Nuts, M.S., Simmonds, 2 B.A.	4
	28W/3071	Washers, M.S., 0.19" i.d. x 0.50" o.d.	8
	30A/544	M.S., sheet, 16 S.W.G.	6" x 1'0"
	30B/219	Dural, sheet, 16 S.W.G.	6" x 8"
21	30A/288	M.S. flat, 1"x 1/4"	1/2"
	30A/396	M.S. round, 5/32" d.	3"
	31A/5	Ash, 3"	3/8" x 6"
	28M/5850	Nuts, M.S., Simmonds 4E.A.	2
	28Q/1830	Rivets, M.S., Sn.hd. 1/8" d. x 1/2" long	14
	28Q/6649	Rivets, chobert, L.A., C/sk hd. 1/8" d. x 3/18"	20
	30E/220	Dural, sheet, 18 S.W.G.	2" x 2"
	Approximately 150 man hours are required for this work including 100 man hours for manufacture of the necessary parts.		
22			

<u>CLASS</u>	-	4
<u>EMBODIMENT</u>	-	All Units
<u>EQUIPMENT</u>	-	Modification set as at I (A) above by arrangement with HQ. 206 Group. Additional items required as at I (B) above from Unit resources through normal channels.

TELEGRAM

TO: CIVILAVIA - ROMA
AEROZONA - MILAN
AEROZONA - PADUA
AEROZONA - ROME
AEROZONA - BARI
AERONAUTICA - CAGLIARI
AERONAUTICA - PALERMO
AERONAUTICA - BARI
AIR FORCES BRANCH

TELEMETAEREO 12973/TEL/752 COLL. FOR CIVILAVIA ROME, ALL
AEROZONE AND THE I.A.F. AT CAGLIARI AND PALERMO AND FOR
INFORMATION I.A.F. BARI. WE HEREBY INFORM YOU THAT FROM
MAY 16 UNTIL JUNE 16 BETWEEN 10.00HRS AND 12.00 HRS
TARGET RELEASE EXERCISES WILL TAKE PLACE ON THE GUIDONIA
AIRPORT AND THE SURROUNDING AREA WITHIN A RADIUS OF
10 KMS. HEIGHT 500-1500 METRES. PLEASE INFORM ALL
INTERESTED UNITS.

GENERAL BARBA

TRANSLATED: L.A.C. DOSI

*Have Cargues
informed 17/5/47
active file*



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TELEGRAMMA



CIVILAVIA SEDS
AEROLONA MILANO
AEROLONA PADOVA
AEROLONA ROMA
AEROLONA RARI
AERONAUTICA CAGLIARI
AERONAUTICA PALERMO
AERONAUTICA BARI

TELENTAHEO 12973 /TEL 1.1 DESTINATARI CIVILAVIA ROMA TUTTE
AEROLONA ET AERONAUTICA CAGLIARI PALERMO CONOSCENZA AERONAUTICA
BARI 1.1 COMUNICASI CHE DAL GIORNO SEDICI MAGGIO AT GIORNO
SEDICI GIUGNO C.A. DALLE ORE 10 AT ORE 12 VERRANNO RECHIESE
PROVE SGANCIO MANICA RIMORCHIATA SU AEROPORTO GUDONIA ET
SINTORI ENTHO RAGGIO MILCI CHILOMETRI 1/1 QUOTA TRA 500 ET
1300 METRI 1.1 PREGASI INFORMARE LRTI INTERESSATI 1.1 GENOVA
LE HABBA

AIR FORCE BRANCH ALLIED FORCE HEADQUARTERS APO 794

3601

994
8925 (9)

(5) LROF V MMXK NR T 276/19 R/R QVR 2
FROM HQ MEDME
TO (1) AHQ ITALY
INFO (2) AFSC/ROME
BT

Q3194 19 MAR U/C. YOUR T546 MARCH 10 UNABLE TO SUPPLY UNTIL
AUTHORITY RECEIVED FROM AIR MINISTRY . MEDME/205641/ORG2. DEC 6TH
AND SIGNAL 0385 MAR 10 REFERS

BT 191045Z

SENT TR B 1 K

RD DM AT 1203 KK

A.217

33/AIR.

Chubb
25/3
III Reports to forward. Chubb

0850

Air 1

Another del 22/3

22/3

8

File

A.F.H.Q., ITALIAN MILITARY AFFAIRS SECTION, A.F.S.S.

14-11104

H.Q. E.A.F. H.E.D.M.S.

A.M.Q. ITALY.

UNCL. UNCLASSIFIED

0405

4

THESE THREE ED REFERENCES YOUR ABLE GRANTING ONE NINE SEVEN DATED
NINETEEN NINE ZERO SEVEN ONLY UNCLASSIFIED

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UNCL. UNCLASSIFIED

ROUTINE
TECHNICAL

DECLASSIFIED

0405

(4)

THESE THREE ED REFERENCE YOUR ABLE CHAIRMAN ONE NINE SEVEN DATED
ELEVEN MARCH ED TECHNICAL DRAWINGS ONLY REQUESTED ED

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THMS/33/ATW/AR.

ROUTINE
TECHNICAL

445

H. THOMSON T/AR.

Spills

A.G. JENNISON E/C.

Declassified E.O. 12356 Section 3.3/IND No.

785017

785017

(32) LROF V MMXK NR T112/11 R/R QVR 2
FROM HQ MEDME
TO AHQI
INFO AFSC ROME
GR--- BT

761
(4)

AIR FORCE

7078

AC197 (.) 11/3 (.) U/C-KMD (.)
REF YOUR

R14 DATED 6 MARCH (.) NOT REPREAT NOT POSSIBLE TO
DESPATCH B

BALTIMORE OWING TO LOCAL COMMITMENTS (.) PLEASE
SEND DETAILS OF DIFFICULTIES EXPRIENCE AND WE WILL
ENDEAVOUR TO GIVE YOU ANSWER S AND TECHNICAL DRAWING
BT 110845Z

RPTN'S

G197 110845Z MAR 14 6

SENT E.S. B1 K

IMI WA DESPATCH IN 3RD LINE PAL

VWA DESPATCH BALTIMORE IMI BALTIMORE

RD AT 1640 JA K K B1 K K

C.T.O.
Airt

action Please

my 13/3

13/3
up
A179
33/AIR. 3598

749

⑥

4911

wy 11/3

NR 72 LROF V MMXX T 142/12 ROUTINE QVR 2

FROM AHQ ITALY.
TO HQ MED/ME
INFO A.F.S.C. ROME
BT

T.546 12/3/47. UNCLASSIFIED.
ITALIAN AIRFORCE REQUIRE ONE SET MEDME SPITFIRE MODIFICATION
NUMBER TEN PRACTICE TOWED TARGET GEAR WITH SUITABLE DROGUE AND ~~TOW~~
~~TOWING~~ TOWING CABLE. NOT ~~AVAILABLE~~ AVAILABLE IN ITALY. CAN MEDME
SUPPLY.

BT 12/1430Z
SENT MMXX BRB B K
RD SLIM AT



3597/5

chill
11/3

NR 52. LROF V MMXK T 80/06 ROUTINE QVR - 2.

FROM AHQ ITALY.

TO HQ MED/ME.

INFO A.F.S.C. ROME.

BT

AR. 14 6/3/47. UNCLASSIFIED.

ITALIAN AIRFORCE EMERIENCING DIFFICULTY IN MODIFYING
BALTIMORE FOR DROGUE TOWING. HAVE REQUESTED THAT A BALTIMORE BE
FLOWN AS ~~SOON~~ SOON AS POSSIBLE TO CIAMPINO AIRPORT FOR TECHNICAL
INSPECTION. AIRCRAFT NOT AVAILABLE IN ITALY. CAN MEDME ARRANGE FLY
BALTIMORE TO CIAMPINO ROME FOR FIVE DAYS. PILOT TO REPORT TO AIR
FORCES SUB COMMISSION ROME.

BT 6/1100/Z

SENT MMXK BRB PLSE AMDN WA AIRFORCE EXPERIENCING

SENT MMXK BRB AR TKS K

RD NR 52 AT 1340 RKK KK AR

A FORCE



3590

Seen 10-11/10
07/000
Child
8/5

785017

22515/PI266 20,000 Pads 8/42 K&J 51-5345

R.A.F. Form 1924

POSTAGRAM.Originator's Reference Number:—
TMA/937/AIN/AF

To: Air Headquarters Italy, R.A.F.

Date:— 21st February 1947

4A

From: Air Forces Sub Section, I.M.A.S., Rome.

TARGET TOWING - I.A.F.

1. Reference is made to your signal R 55 dated 7th February 1947 and it is requested that MEDME assistance in the provision of the Baltimore Target Towing Aircraft for IAF technical inspections may be expedited.
2. With regard to my postagram of even reference dated 12th February 1947 it is required to know whether you have such a dregue in Italy. If not it is requested that you will also ask MEDME to assist in this matter.

*Chirik*Originator's C.M.M. GRECE W/CDR. Air I
SignatureTime of
Origin

3595

21 Feb 1640 hrs

R5017/P.1491 00,000 Pads. 9/18. & Co. Ltd. 51-7342

R.A.F. Form 1924

POSTAGRAM.

Originator's Reference Number:—

HMAS/33/AIR/AF.

To: Air Headquarters Italy, R.A.F.

Date:— 12 Feb 1947.

3A
73A

From: Air Forces Sub Section, I.M.A.S., Rome.

1. Due to present lack of any other towing aircraft Italian Air Force hope to use a sleeve towed by Spitfire IX aircraft for air to air firing.
2. If available in Italy it is requested that you will give necessary instructions as to fitting of equipment to I.A.F. officers at present with you and that you will make one such sleeve available to the I.A.F.

Chib.

3594

Originator's Signature C.M.M. GRECE W/CDR. AIRI

Time of 12 Feb 1220 hrs
Origin

(165)

9288

2A

Air Force

NR 69. LROF V MEK T 131/97. IMPORTANT - T - ADD

FROM A H Q ITALY 07/1401 Z

TO A F S G ROME

INFO -----

BT



NR 55. FEB 7. UNCLASS. FOR WING COMMANDER CRECH. YOUR A221

REGRET NO TARGET TOWER S AVAILABLE. NEED ASSISTANCE REQUESTS 3593.

WILL KEEP YOU INFORMED.

BT 07/1401 Z

SENT XXXX BRB B 2 K

NR 69. G.P. TIME 1:1713A KKK

Wf 10/2

From : I.A.F. "Stato Maggiore"
3rd Services Department, Technical Section, Rome.
To : A.F.S.C., A.C., Rome.
Date : 6th February, 1946.
Ref. : 370257 ST 1/13/227 Coll.

1 A
(1)

ANTI-AIRCRAFT TOW-TARGET-SLEEVE.

It is the intention of this "Stato Maggiore" to examine the tow-target-sleeve for anti-aircraft training used by the British Air Forces on Spitfire IX aircraft.

Will you kindly make the necessary arrangements to supply us with a sample sleeve.

for CHIEF OF THE AIR STAFF
(Gen. A. BRIGANTI).

CHIEF OF 3RD DEPARTMENT
s/ (Col. E. CIGERZA)

3592

TRANSLATED BY SGT. J. CUMBO.

3890. *[Signature]*

Ref ϕ

can you obtain a design
from AHQ S. ?
my 7/2

See end 3A.

Chubb.

10/2.



Mod 122[®]

100



Roma - 6 1-13 1947

1947 A

State Magazine & Armaments

10 REPARTO SERVILI - Sez. Tecnica

Al I.A.J. - A.T.S.C. 1A
perante Ufficio Collegamento

tramite Ufficio Collegamento

附錄

Pat. No. 370257

227

227

Proposta al p.^{re} V. del

OGGETTO: *senza* ~~senza~~ rinuncia a rinchiuderlo nei tini contrassei.

E' intendimento di questo Stato "meggiore, prendere in esame la Manica a viorchilo parativi controverai usata dalle forze Aeree Inglesi sul velivolo tipo Spitfire IX. --

Si prega codesta A.T.S.O. affinché voglia inversarsi per la cessione a questa Amministrazione di un esemplare della manica in argomento. --

3591

IL S. CAPO DI STATO MAGGIORE
(Generale S.A. - A. BRIGANTI)

produce

0187423 IN THE CASE

Figure 3. The yield of 3, 5-dinitro-2-chlorobenzene.

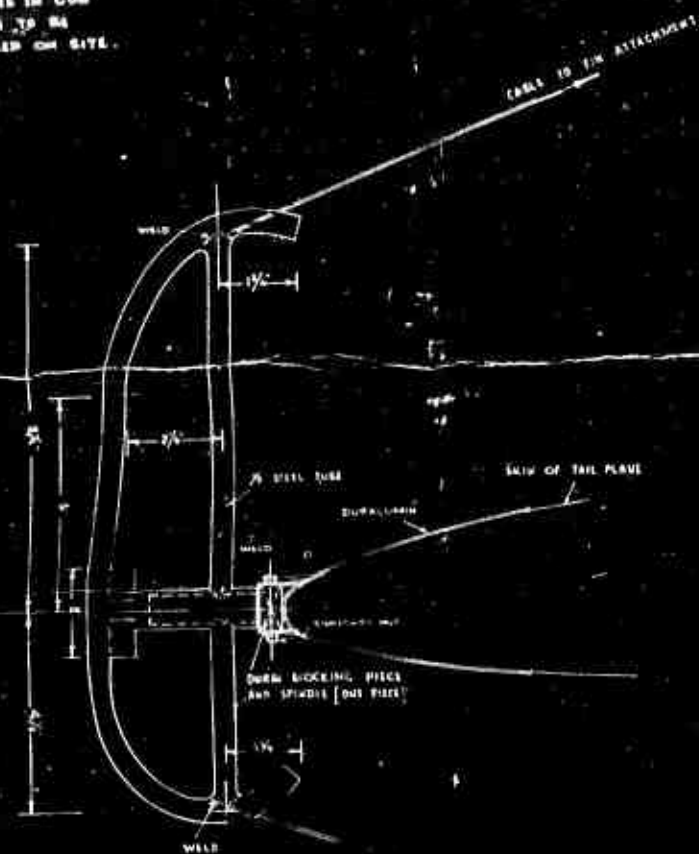
Wm. L. Garrison







NOTE: ALL HOLES TO BE DRILLED TO
MATCH EXISTING HOLES IN CUM
MOUNTING EYE ARE TO BE
LOCATED AND DRILLED ON SITE.



ELEVATION



PLAN

NOTE: BRACKET MADE TO
FIT ON SPINDLE

OUT OF 1/2\"/>

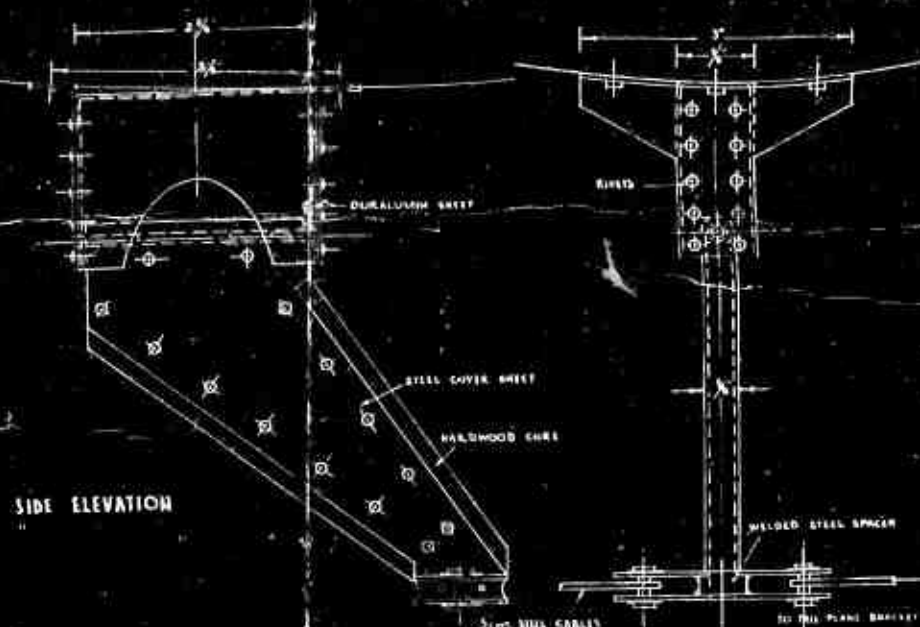
DURALUMIN SPINDLE

PLAN OF SPINDLE
(OUT OF 2\"/>

SECTION AA

TAIL PLANE SAFETY WIRE WING TIP BRACKET

SCALE 1/2\"/>



SIDE ELEVATION



PLAN

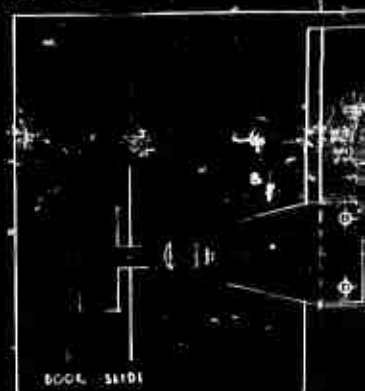


DEVELOPMENT

UNDER TAIL SAFETY WIRE BRACKET

SCALE FULL SIZE
(1 TO 1000)

END ELEVATION



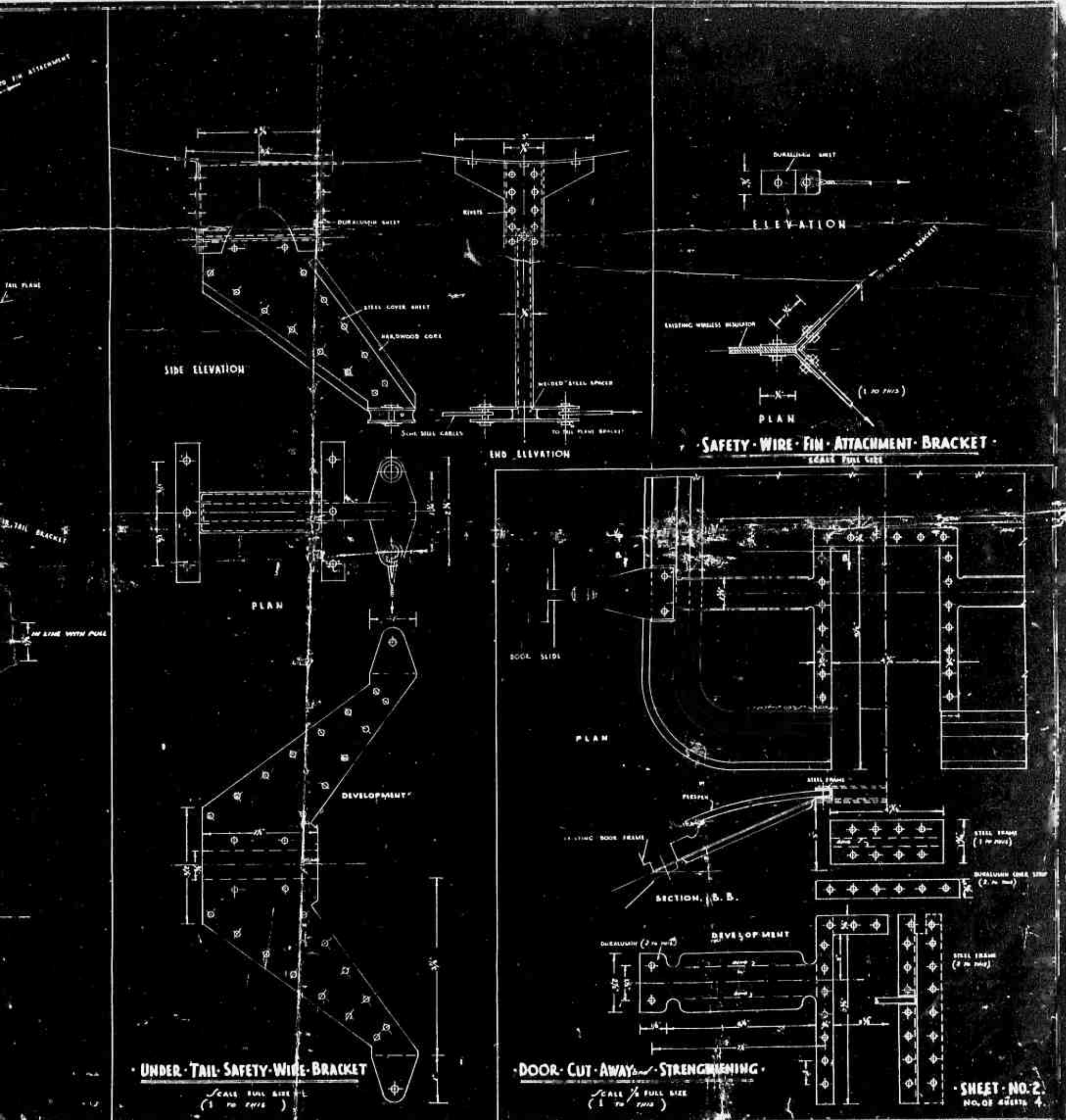
PLAN

EXISTING DOOR FRAME

DURALUMIN (2\"/>

DOOR CUT AWAY

SCALE 1/2\"/>



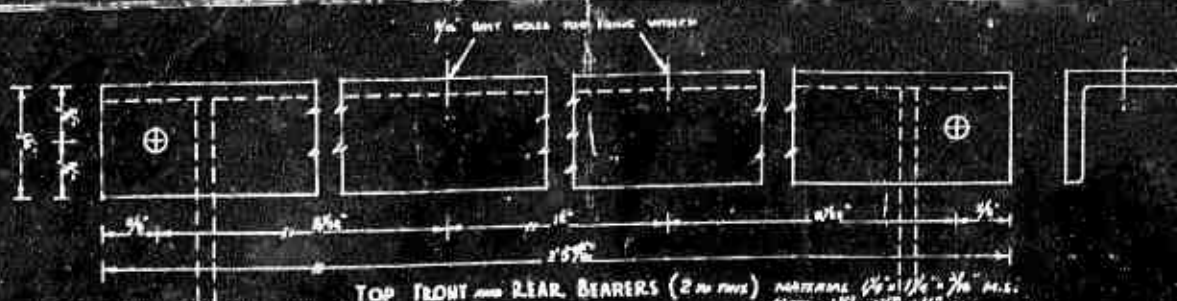
UNDER TAIL SAFETY-WIRE BRACKET

SCALE FULL SIZE
(1 TO 2016)

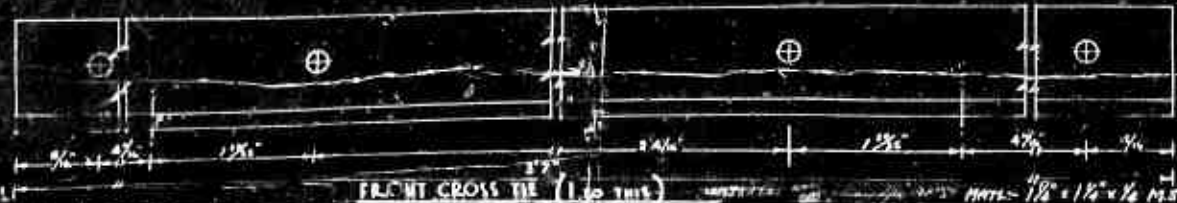
DOOR CUT-AWAY STRENGTHENING

SCALE 1/2 FULL SIZE
(1 TO 2016)

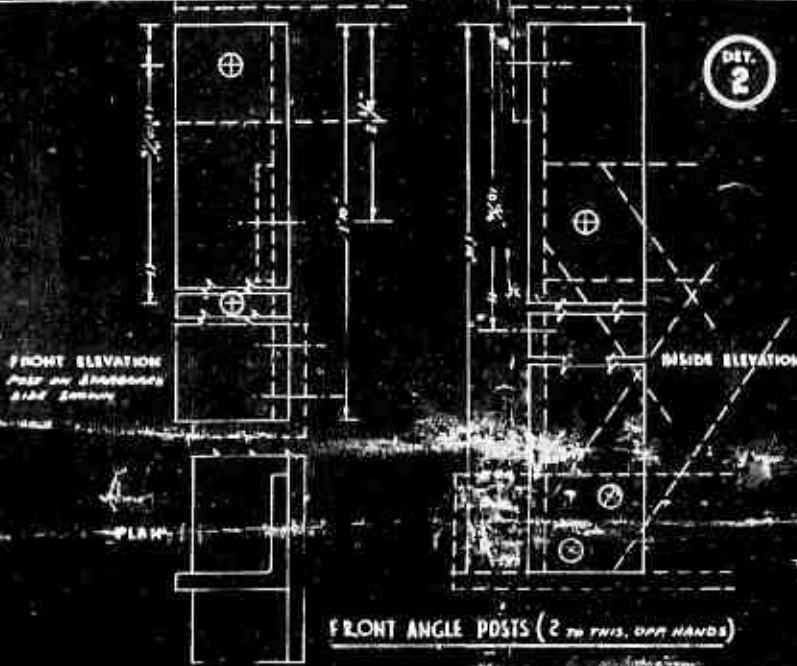
SHEET NO. 2
NO. OF SHEETS 4



DET. 1



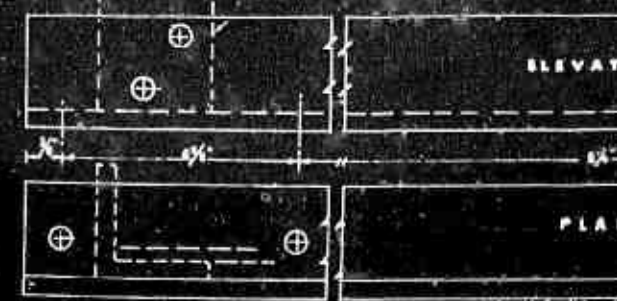
DET. 7



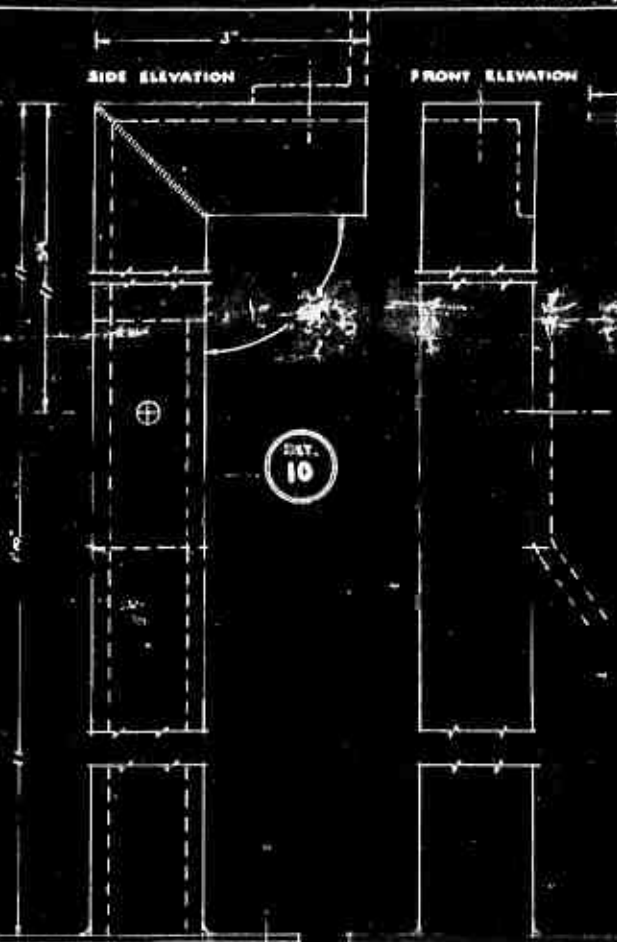
DET. 2

TIES TO SIDE ELEVATION

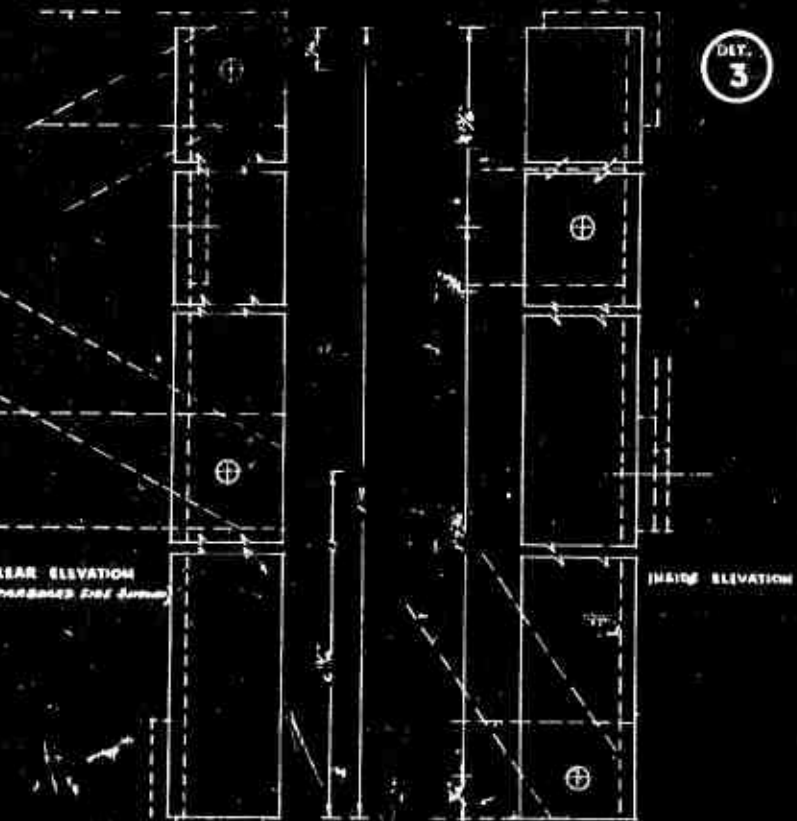
DET. 4



$\frac{1}{2} \times \frac{1}{4}$ STRAP



DET. 10



DET. 3

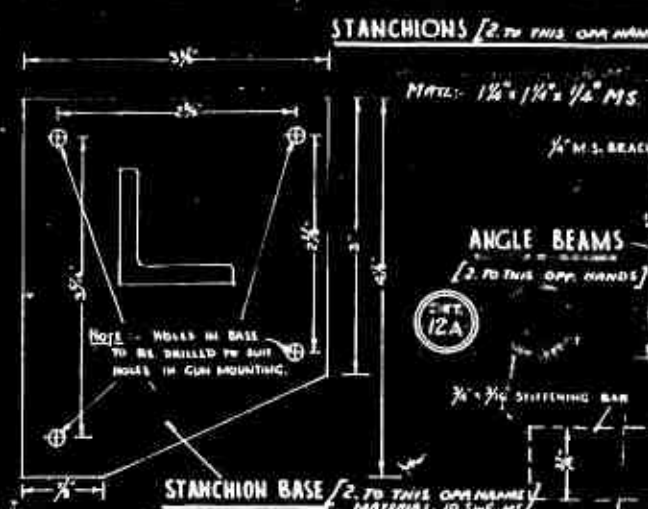
REAR CROSS TIE

1 TO THIS
MATERIAL: $1 \frac{1}{2} \times \frac{1}{4}$ M.S.

DET. 5



DET. 6



DET. 12A

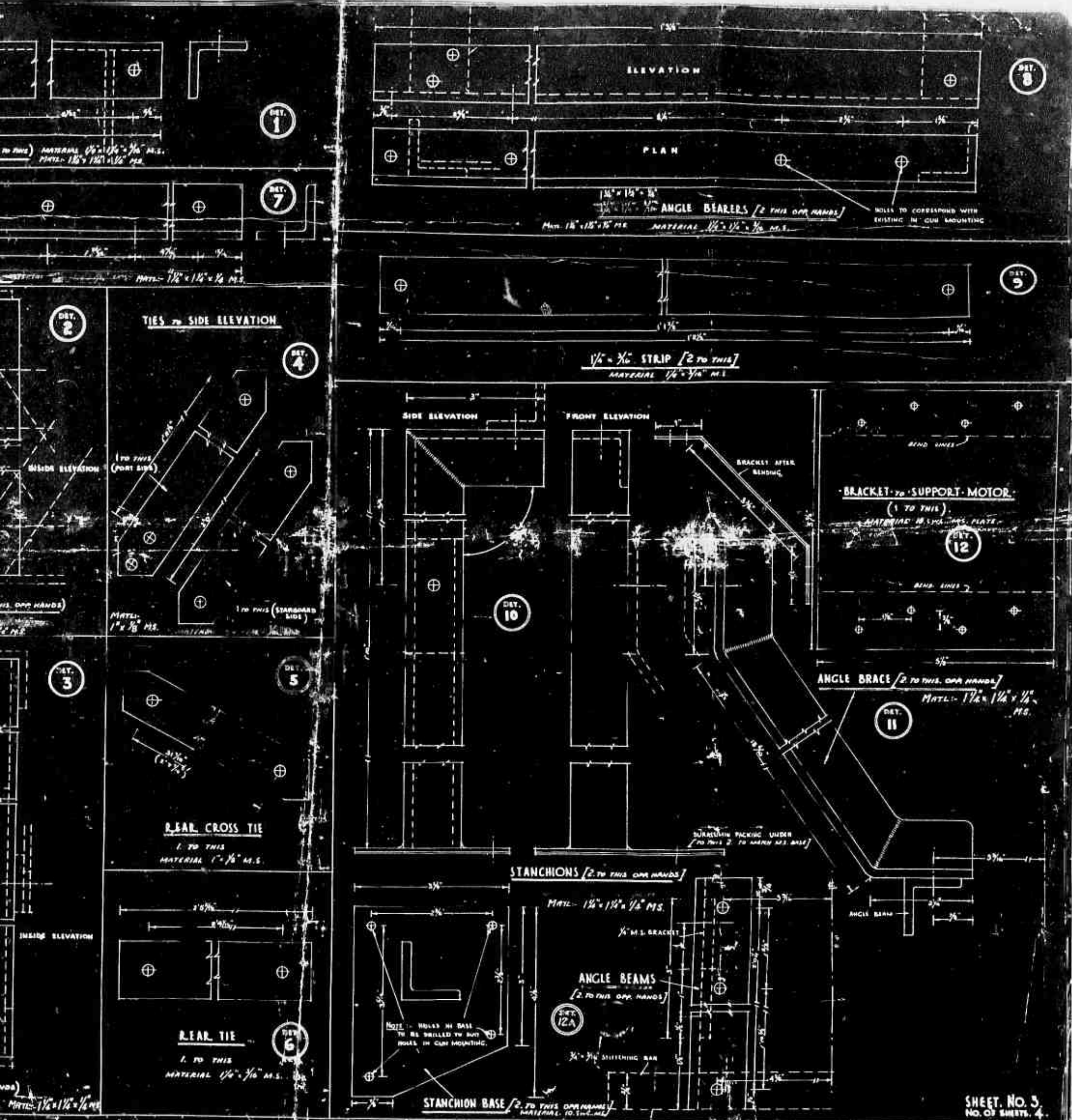
NOTE: ALL HOLES TO BE DRILLED TO
MATCH EXISTING HOLES IN GUN
MOUNTING ETC. ARE TO BE
LOCATED AND DRILLED ON SITE.

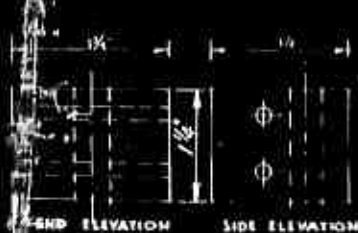
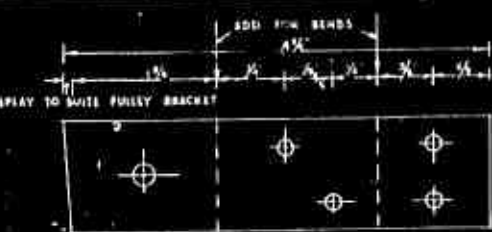
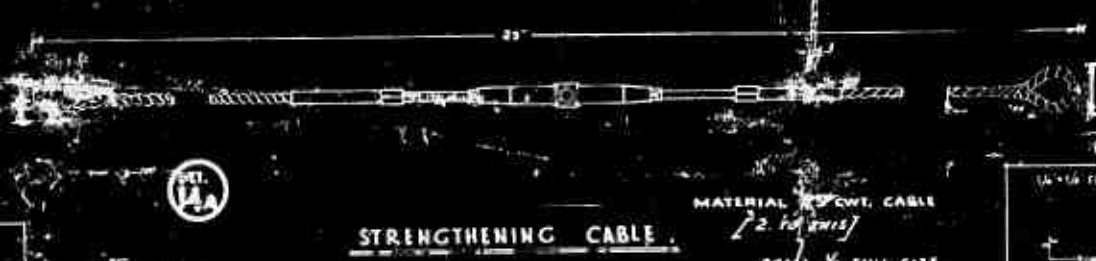
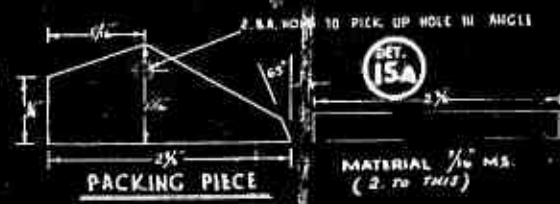
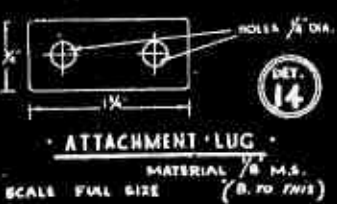
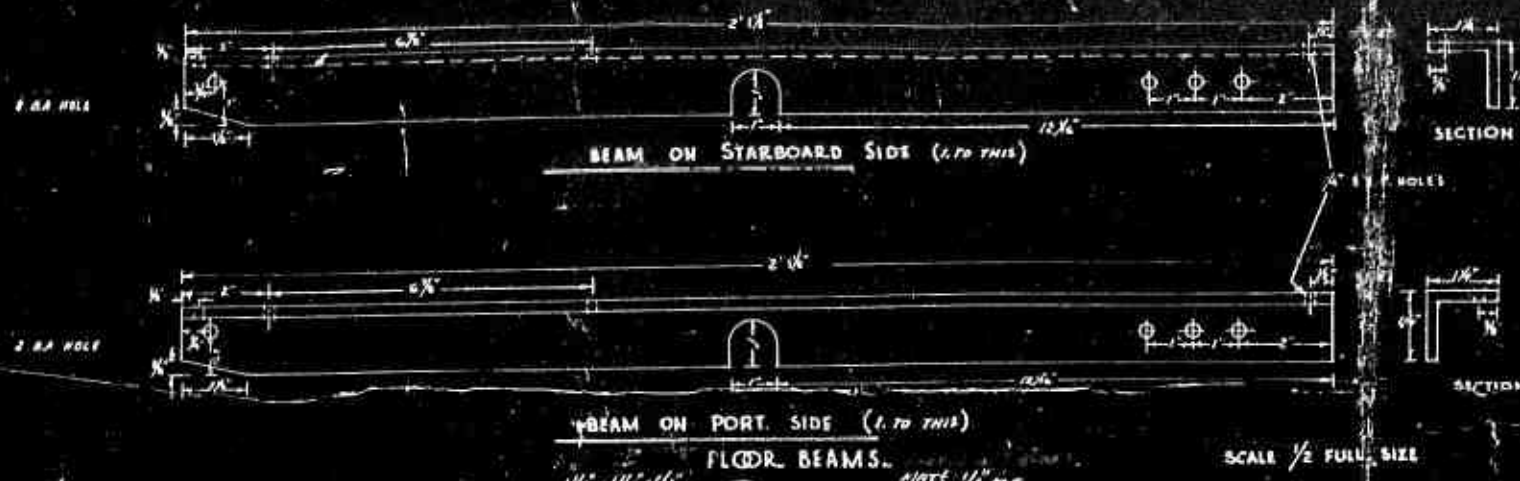
REAR ANGLE POSTS (2 TO THIS, OPP HANDS)

MATERIAL: $1 \frac{1}{2} \times 1 \frac{1}{4} \times \frac{1}{4}$ M.S.

DRAWING NO. 2026/207 PRINT NO.
JOB NO. 5514
DATE 3-27-57

GIAMACIS MOUNTING and INSTALLATION for STANDARD TRIPLE DRUM MOTORISED TYPE E-24V 9A/1309-V
FULL SIZE DEVELOPMENTS AND DETAILS OF FRAMING





NOTE: ALL HOLES TO BE DRILLED TO SUIT EXISTING HOLES ON COW MOUNTING ETC. ARE TO BE LOCATED AND DRILLED ON SITE.

