

TRANSMITTAL NO. 39-B

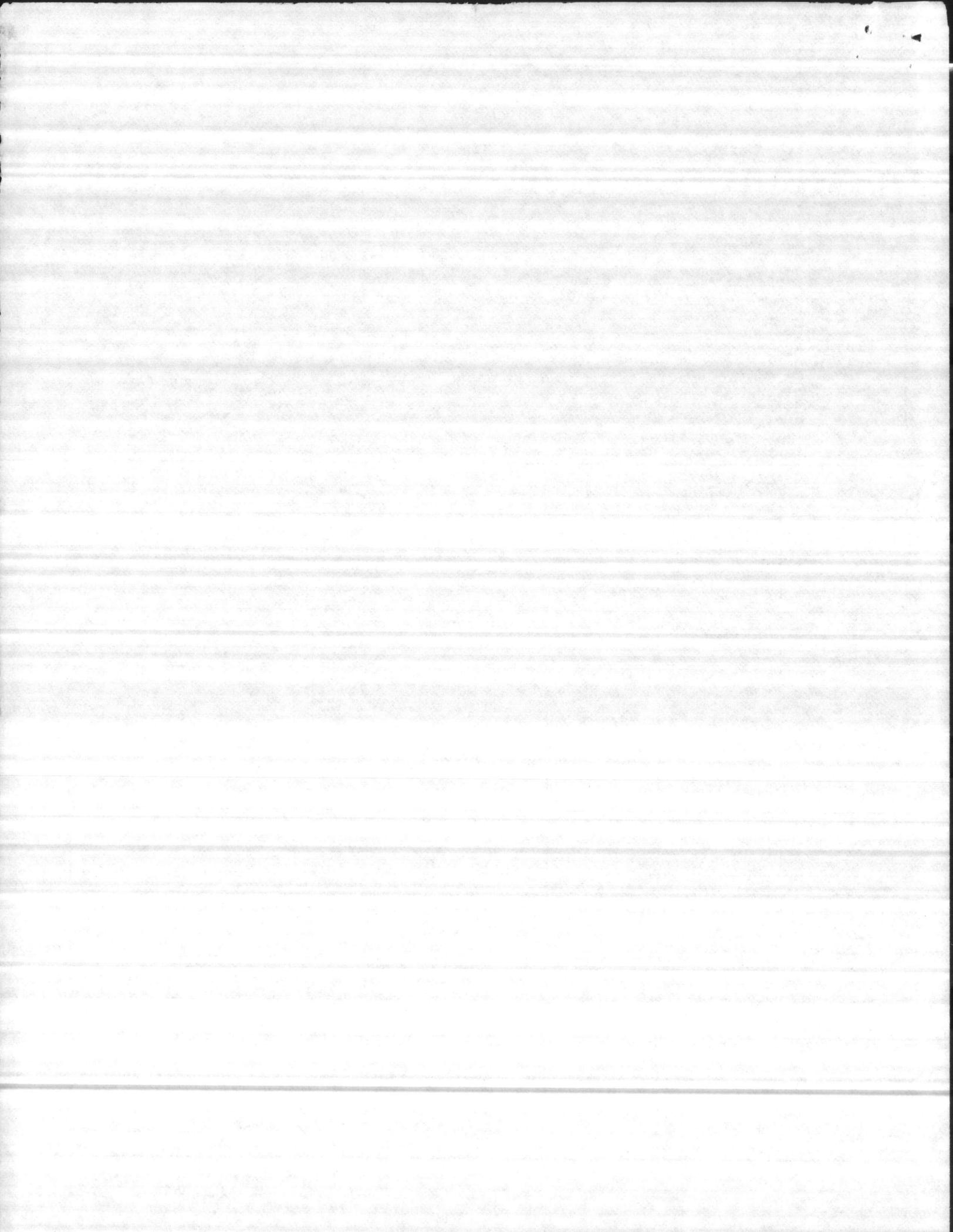
WESTMINSTER COMPANY

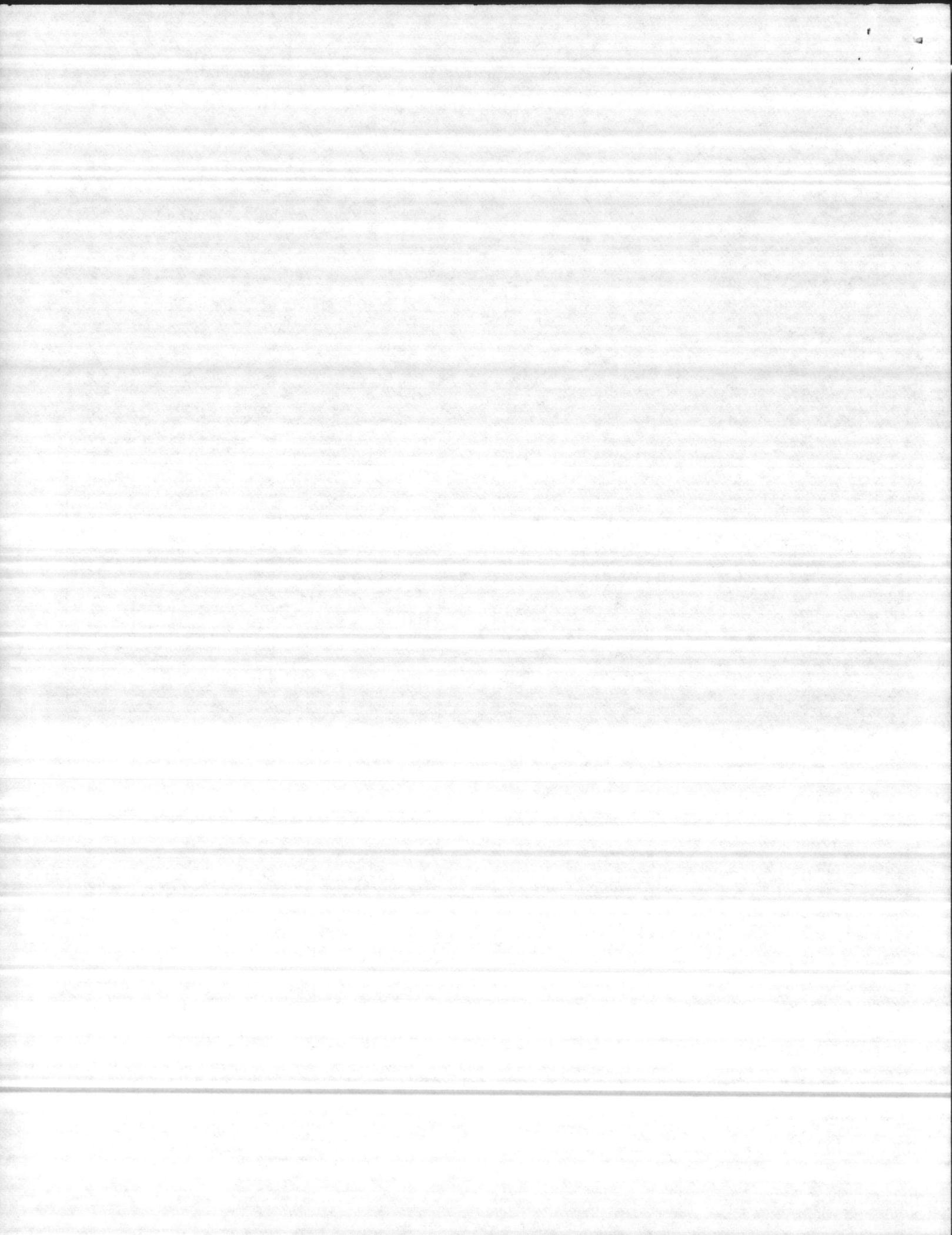
SEC. 16335 - PAD-MOUNTED TRANSFORMERS

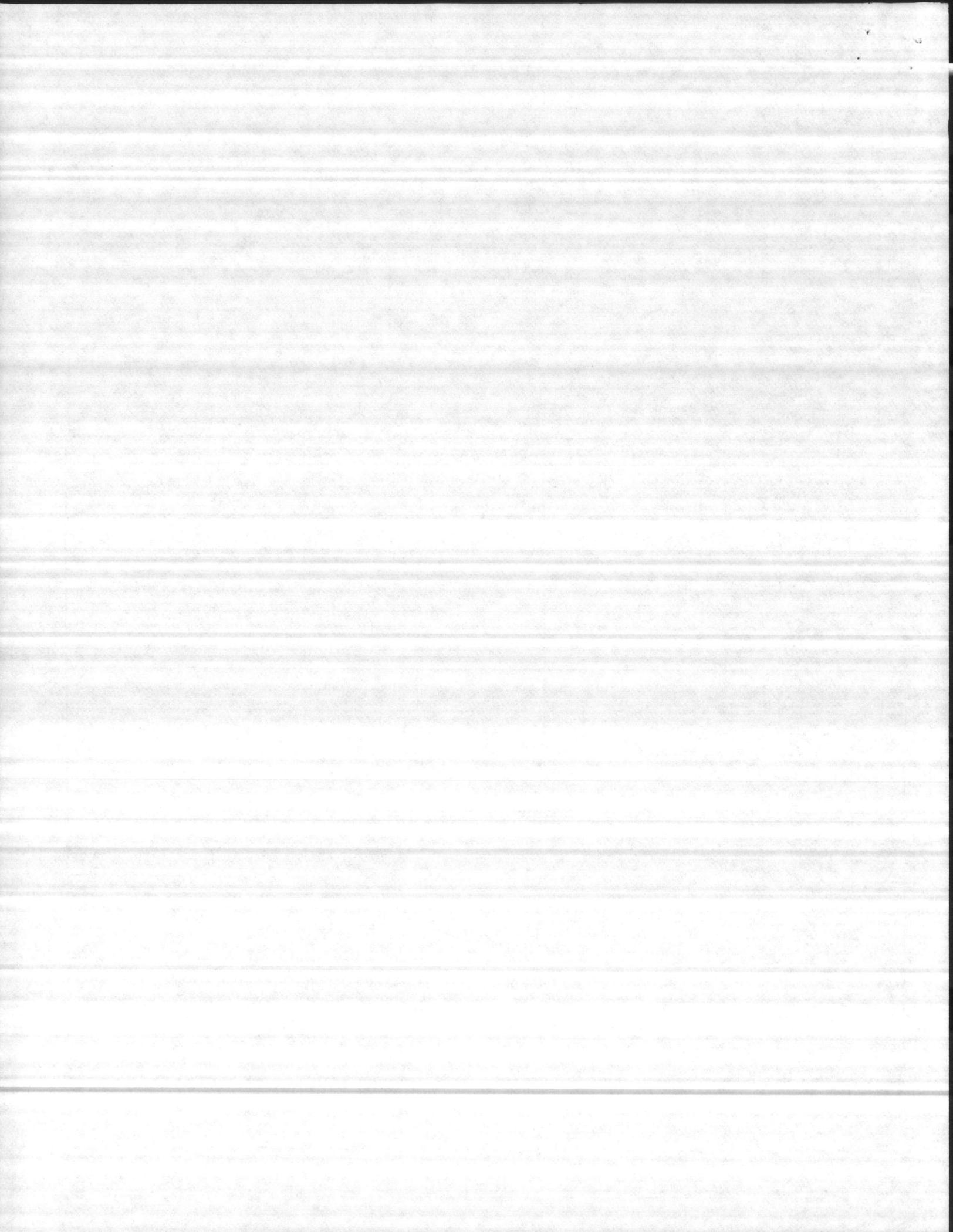
UNACCOMPANIED ENLISTED PERSONNEL HOUSING
MARINE CORPS BASE

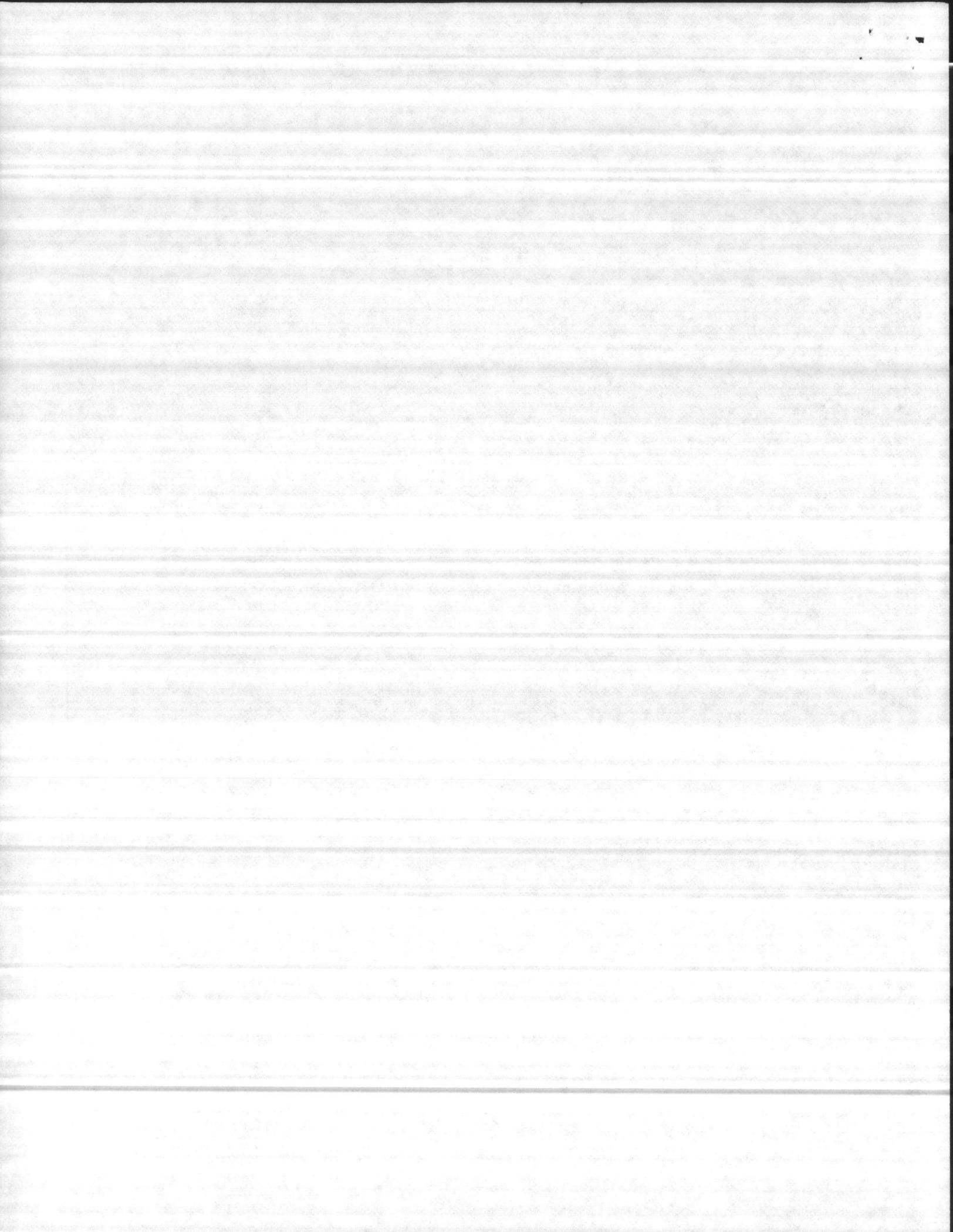
CAMP LEJEUNE, NORTH CAROLINA

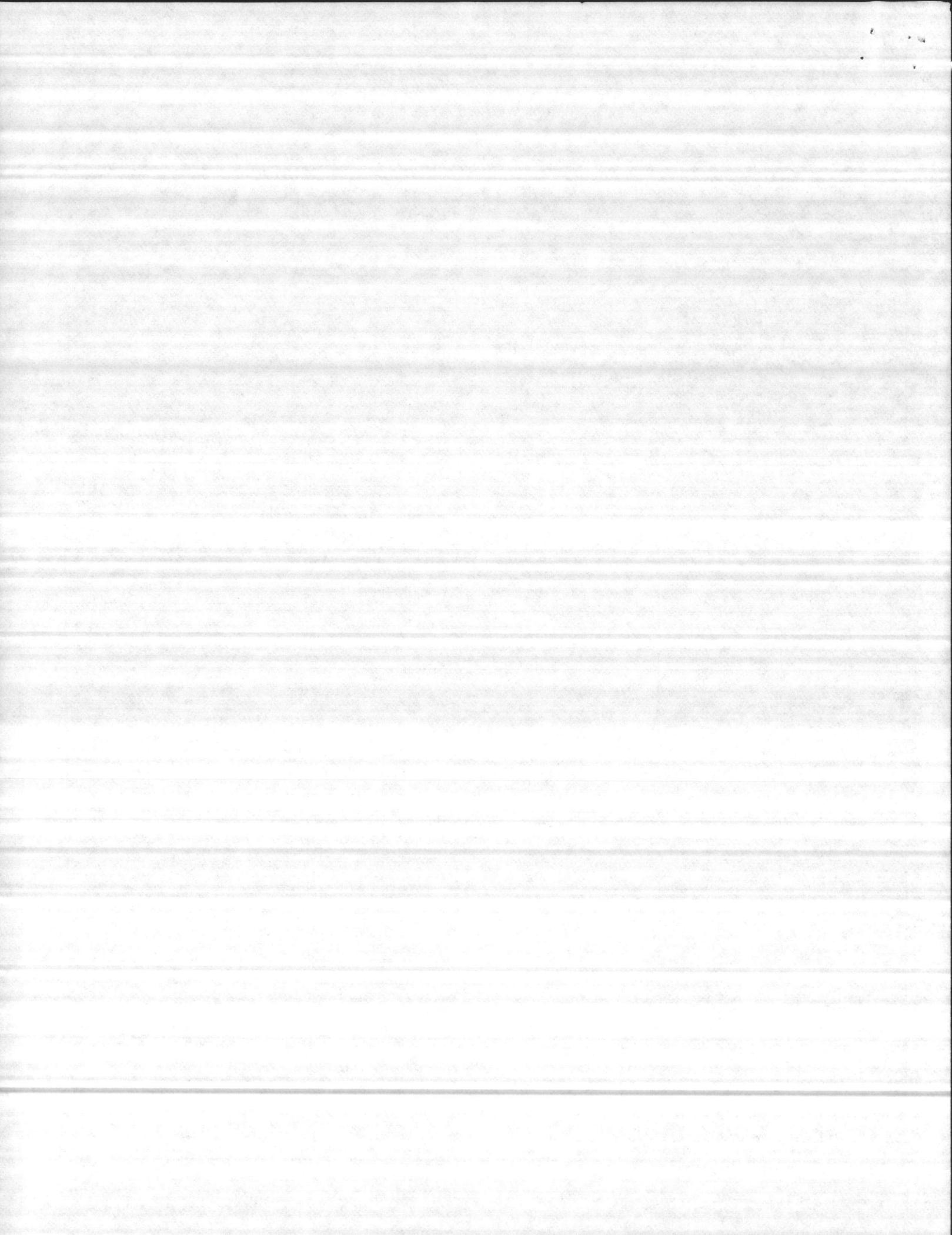
CONTRACT NO. N62470-82-C-2244

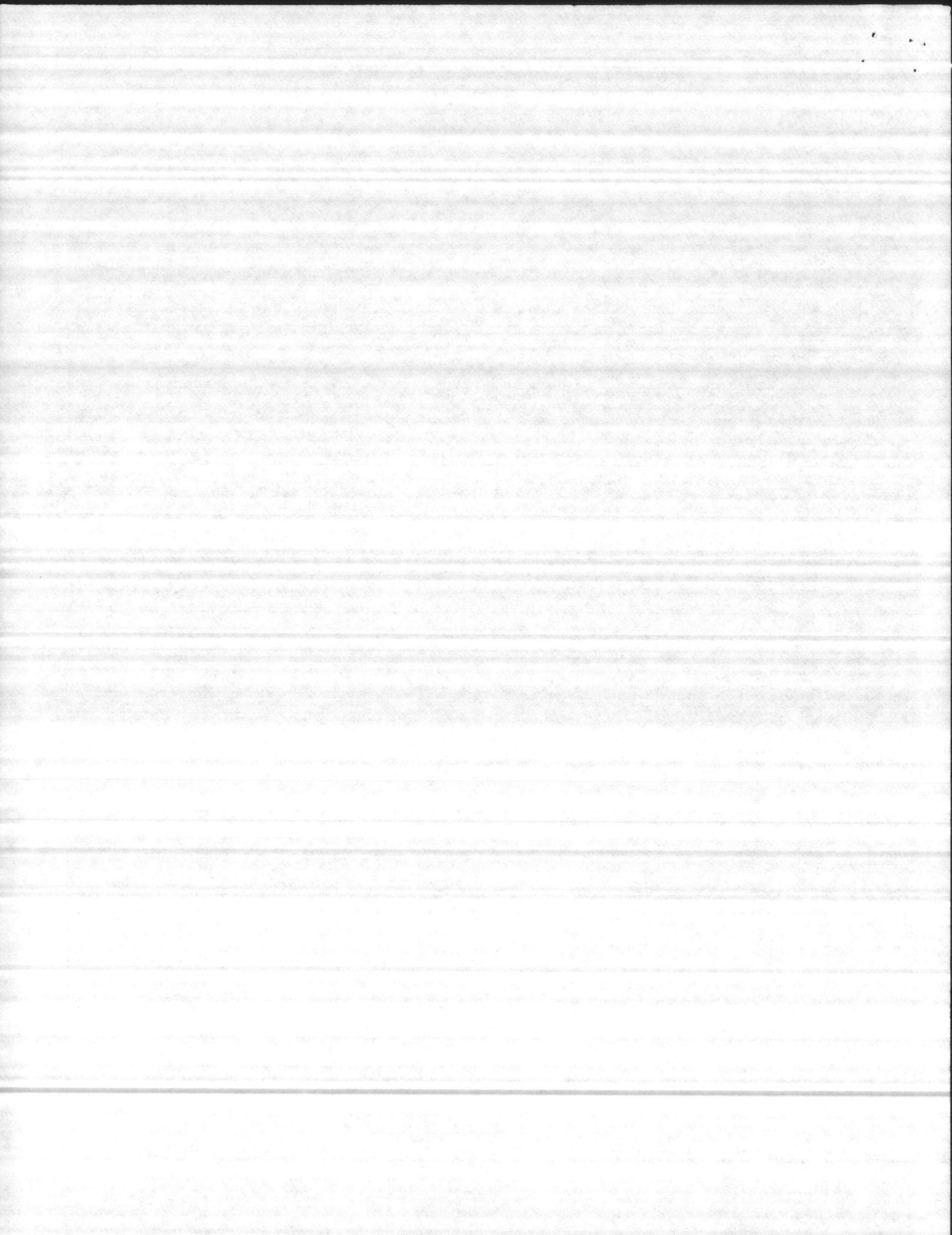


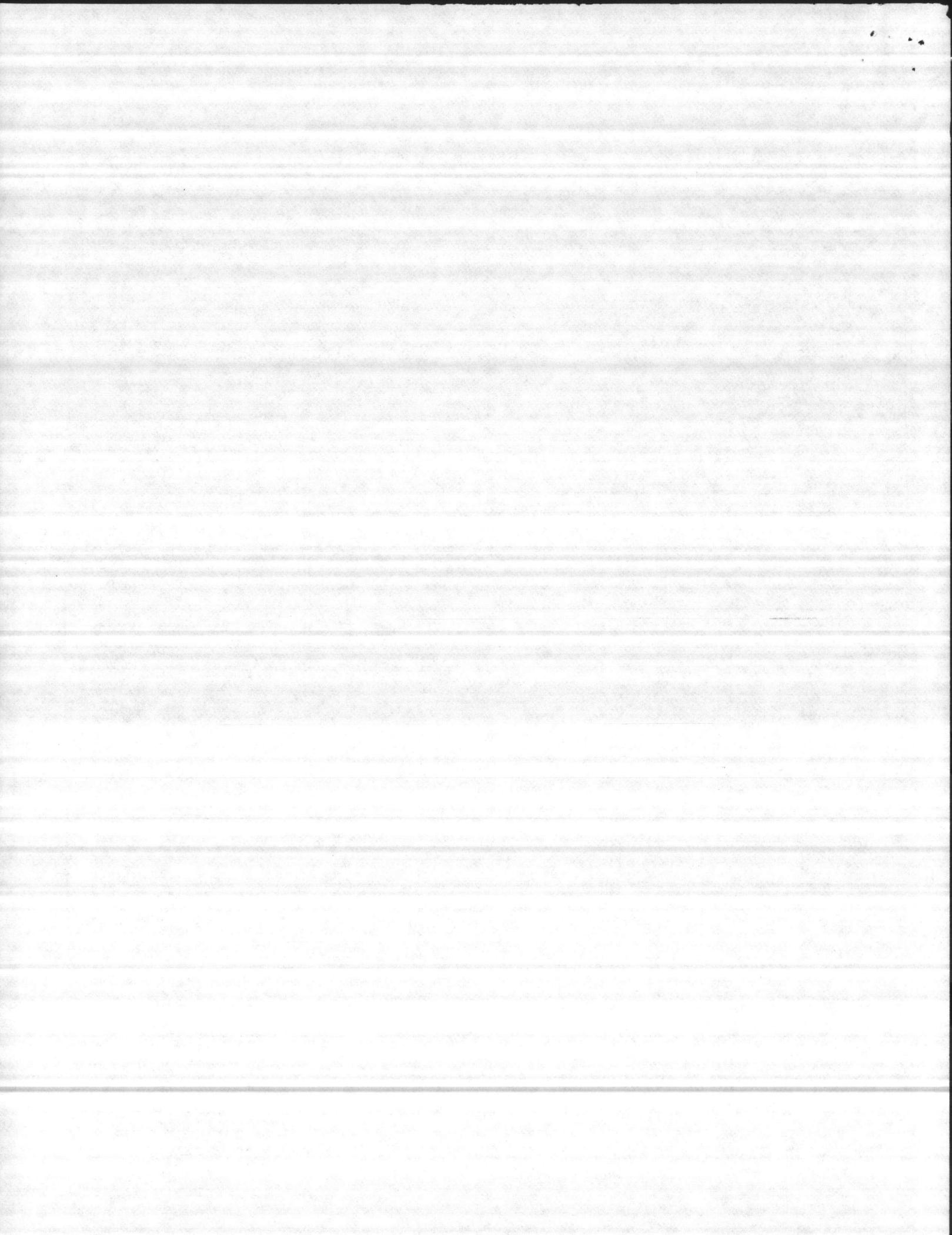














P. O. BOX 2419 • RALEIGH, NORTH CAROLINA 27602 • TELEPHONE (919) 828-4411

REFERENCE TO MATERIAL CERTIFICATION

PROJECT

Unaccompanied Enlisted Personnel Housing

MARINE CORP BASE

Camp Lejune, North Carolina

N62470-82-C-2244

Specification Section 02821 - Turf

Specification Section 02490 - Trees, Plants, Ground Cover

This is to certify that the fertilizer to be used for the above reference project, conforms to all requirements specified.

David Dawson
Manager FCX Blend Plant



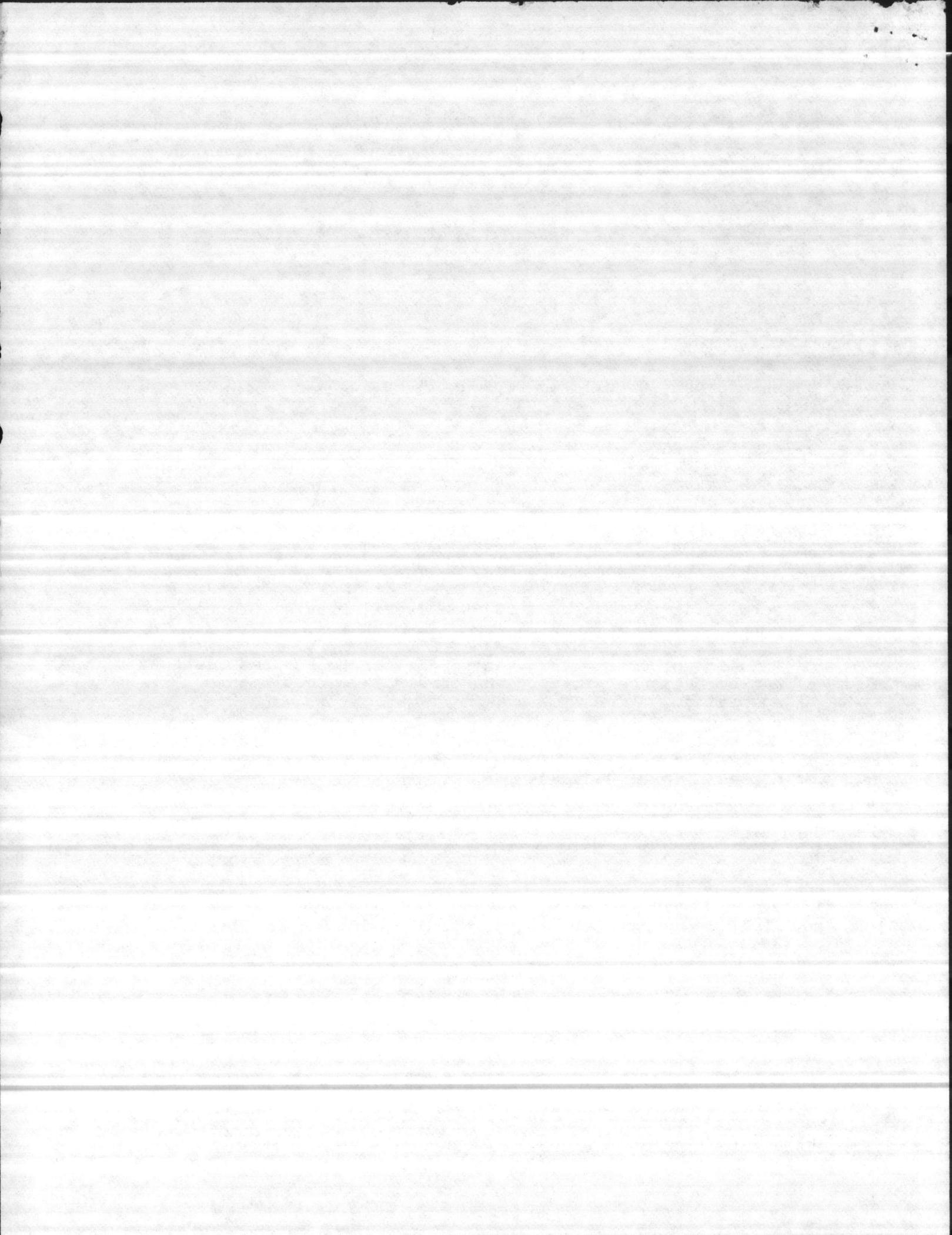
1934

50th

ANNIVERSARY



1984



Westinghouse Electric Corporation

SEND APPROVALS OR INQUIRIES TO:

P. O. Box 32817
Charlotte, N. C. 28232

TRANSMITTAL DATE

S. O. NO.	PROD. CODE	ATTN. ORDER SERVICE REP. B. T. PENDER	CUST. ORDER NO. 84E651	G. O. NO. & DATE-C/N DATE CH-33095-RJ
CUSTOMER Maddux Supply Co Greenville, N. C.			ULTIMATE USER AND/OR MARKINGS Southerland Elec Co c/o U. E. P. H. Camp LeJeune, N. C.	

<input checked="" type="checkbox"/> FOR APPROVAL, TO MAINTAIN SHIPPING SCHEDULE, APPROVED DWGS, MUST BE RECEIVED BY WESTINGHOUSE ON <u>9/18/84</u>	<input type="checkbox"/> FOR CONSTRUCTION OR INSTALLATION	<input type="checkbox"/>
DRAWINGS ARE IN COMPLIANCE WITH YOUR SPECIFIED REQUIREMENTS, DRAWINGS "APPROVED" OR "APPROVED WITH MODIFICATIONS" AUTHORIZE WESTINGHOUSE TO PROCEED WITH THE MANUFACTURE, MODIFICATIONS NOT IN THE CONTRACT OR MODIFICATIONS MADE DURING OR AFTER DRAWING APPROVAL MAY RESULT IN A PRICE CHANGE AND/OR SHIPMENT DELAY.		THE EQUIPMENT SHOWN ON THESE DRAWINGS(S) HAS BEEN RELEASED FOR MANUFACTURE, ANY MODIFICATION MAY RESULT IN PRICE CHANGE OR SHIPMENT DELAY.
		RPD APPROVAL BY: <input type="checkbox"/>

DRAWINGS				INSTR. BOOKS		RPD		TEST REPORTS	SPECIFIC CUSTOMER INSTRUCTIONS ARE DETAILED IN NOTES
APPROVAL		CONSTRUCTION OR INSTALL.		BND.	UN-BND.	STD.	REC. PRICED		
STD./ SKETCH	PAPER REPRO	PAPER	* REPRO						MAIL DWGS. TO
12		12						6 AS NOTED	Maddux Supply Co Box 4067 Greenville, N. C. 27834 Attn: J.E.C. 11 JUL 1985
1		1						1	RALEIGH OFFICE - L. Vaughan
1		1						1	CHARLOTTE OFFICE - B. T. Pender

THIS LINE FOR DIVISION USE ONLY

T/S									
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ITEM	QUANTITY	DESCRIPTION
1	1	75 KVA Transformer, Style A65A760X2K
2	2	300 KVA Transformer, Style A65A530X2L
3	1	150 KVA Transformer, Style A65A490X2M
4	1	112.5 KVA Transformer, Style A65E120X2N

Item 5 Qty 1 500 KVA Transformer, Style A65E560X2P

ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511

~~APPROVED~~
~~APPROVED AS NOTED~~
~~DISAPPROVED~~

SUBJECT TO THE REQUIREMENTS OF CONTRACT NO. **05-82 2244**

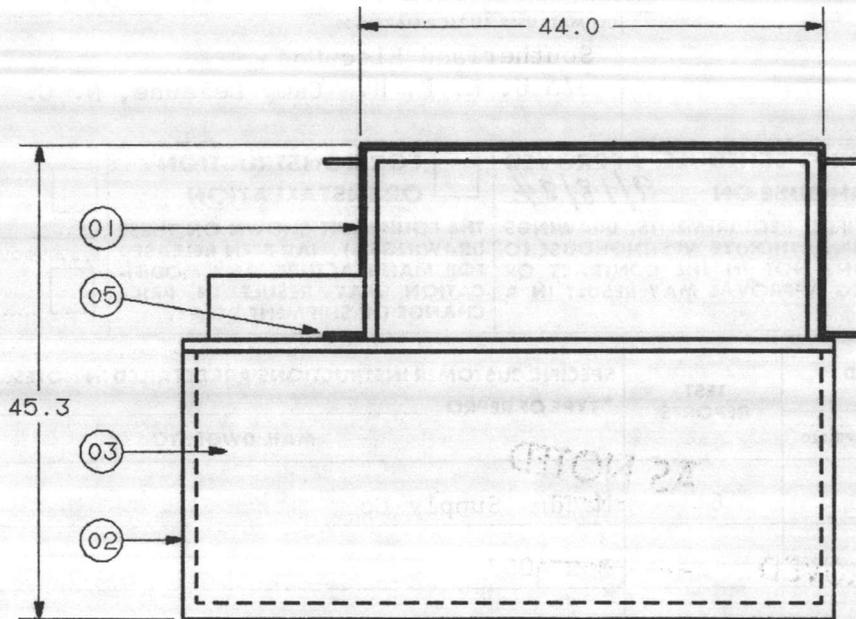
APPROVAL OF A SUBMITTAL DOES NOT INCLUDE APPROVAL OF ANY DEVIATION FROM THE CONTRACT REQUIREMENTS UNLESS THE CONTRACTOR CALLS ATTENTION TO AND SUPPORTS THE DEVIATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROPER PHYSICAL DIMENSIONS & WEIGHTS, COORDINATION OF TRADES, ETC. AS REQUIRED.

REVIEWER: **J.E.C.** DATE: **11 JUL 1985**

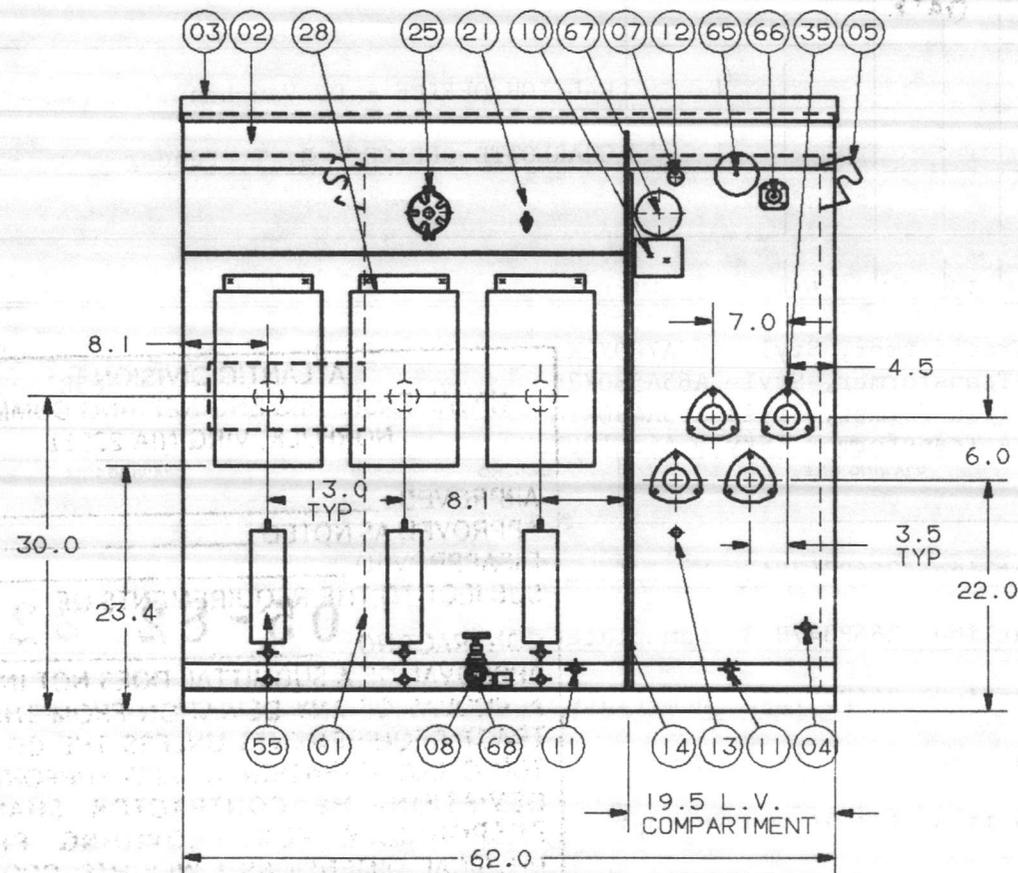
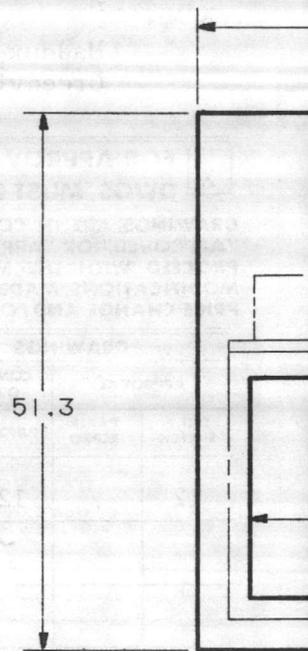
DWG. NO.	SUB	DRAWING TITLE
Item 1	7146C25	Outline 266P347H43 Nameplate
Item 2	7146C26	Outline 266P347H43 Nameplate
Item 3	7146C27	Outline 266P347H43 Nameplate
Item 4	7146C28	Outline 266P347H43 Nameplate
Item 5	7146C29	Outline 266P347H43 Nameplate

* THIS TRANSMITTAL IS COMPLETE PARTIAL With Drawings Noted Above Or On Attached Sheet to be sent by **Rosemary Augustine**

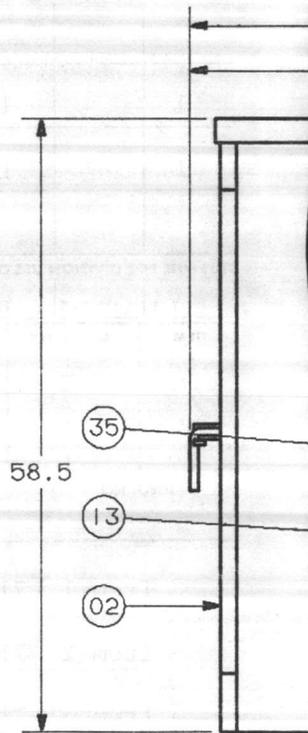
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TOP VIEW



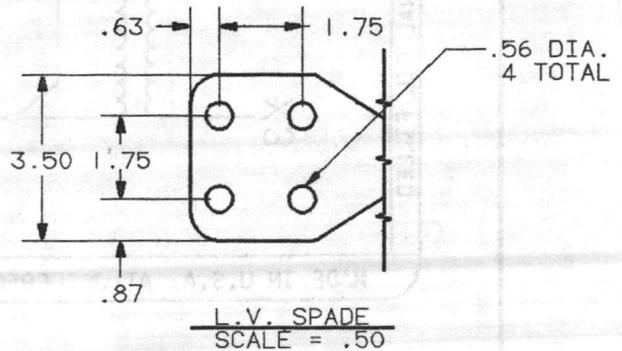
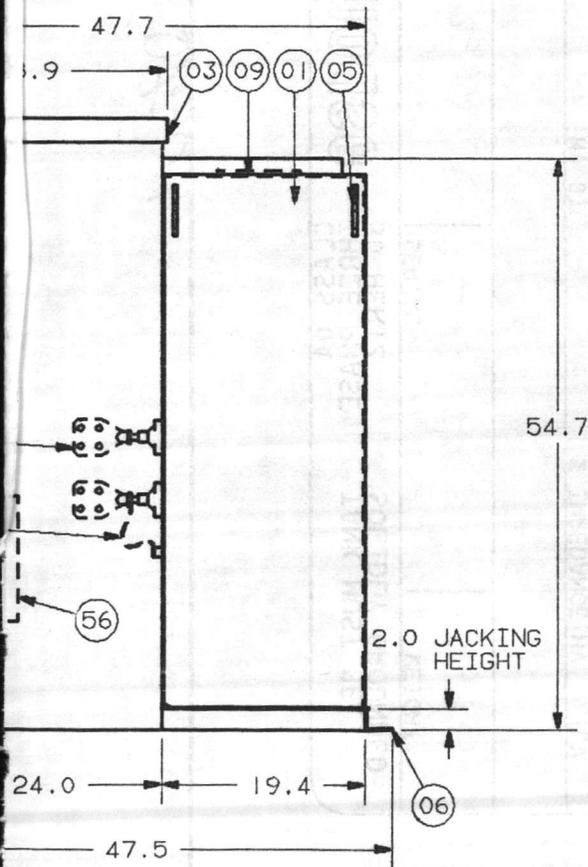
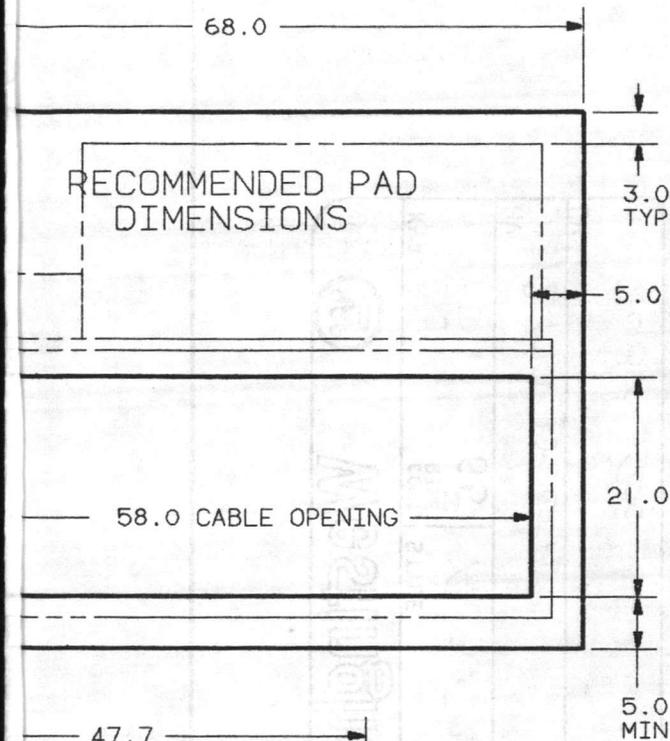
FRONT VIEW



43" OPEN DOOR SWING

THIS OUTLINE IS FOR ERECTION OR MOUNTING PURPOSES. IT IS NOT TO SCALE AND SHOULD NOT BE REGARDED AS INDICATING THE EXACT DETAILS OF CONSTRUCTION.

- 01 TANK
- 02 CABINET BOLTED-ON, REMOVABLE SILLS, OPEN BOTTOM 1 INCH FLANGE, HINGED LIFT-OFF DOOR, PROVISION FOR PADLOCK, STOP IN OPEN POSITION.
- 03 WEATHER COVER, REMOVABLE
- 04 PROVISIONS FOR TANK TO CABINET GROUND
- 05 LIFTING HOOKS, 4 TOTAL
- 06 SHIPPING BRACKETS
- 07 1 INCH FILL PLUG
- 08 1 INCH DRAIN PLUG
- 09 HANDHOLE, 10 INCH X 18 INCH, BOLTED-ON COVER
- 10 NAMEPLATE MOUNTED ON TANK WALL
- 11 GROUND PAD .50-13-TAP, HV AND LV COMPARTMENT
- 12 PRESSURE RELIEF DEVICE
- 13 LV NEUTRAL GROUND PAD .50-13-TAP WITH GROUND STRAP
- 14 HV/LV BARRIER
- 21 300 AMP LBOR SWITCH
- 25 TAP CHANGER
- 28 3-POLE EFD SWITCH
- 35 LOW VOLTAGE BUSHING
- 55 10KV LIGHTNING ARESSTOR
- 56 PROVISION FOR MOUNTING 1 JB3250
- 65 PRESSURE VACUUM GAUGE
- 66 OIL GAUGE
- 67 THERMOMETER
- 68 DRAIN VALVE WITH SAMPLER



RIGHT VIEW

CUSTOMER: MADDUX SUPPLY CO		WESTINGHOUSE ELECTRIC CORPORATION		REV NO 01
GO&ITEM CH33095-001	H.V. 12470 DELTA	TITLE OL3PAAC	DEF XXX FIN XX U/M XX NOTE XX	USER 183
KVA 75	L.V. 208Y/120	DIMENSIONS IN INCHES-SCALE .11 CADAM AAA760210N00000#01,1		
REV DATA	DFTM L. HUESTE	080284	APPD	7146C25
	D SPEC 42801	APPD		
	ENG. REF XXXXX	AAA1099490210N00000,1		
		UDTD ENGINEERING DEPT.		JEFFERSON CITY, MO. USA

Item 1.



Westinghouse

CLASS 0A
THREE PHASE
60 HERTZ

TANK MUST BE
SOLIDLY GROUNDED

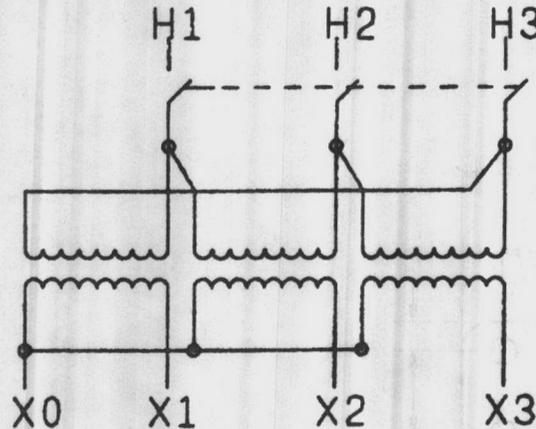
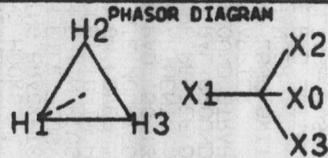
KVA	CONT RISE °C	STYLE	SERIAL	WEIGHT
75	65	A65A760X2K	-	2695

HV	12470 DELTA			
LV	208Y/120	HV BIL	% IMPEDANCE	HV LV
		95	3.60	AL AL

TAP CHANGER AND SWITCH

CAUTION: BEFORE OPERATING READ INSTRUCTION BOOK 46-060-1
FILLED WITH NON-PCB MINERAL OIL THAT CONTAINED LESS THAN 1 PPM AT TIME OF MANUFACTURE

TAP	SWITCH POS 1	SWITCH POS 2
	VOLTAGE	VOLTAGE
1	13095	
2	12785	
3	12470	
4	12160	
5	11850	



MADE IN U.S.A. AT JEFFERSON CITY, MO.

266P347H43

DISTRIBUTION TRANSFORMER

MINERAL OIL FILLED

WESTINGHOUSE UNDERGROUND DISTRIBUTION TRANSFORMER DIVISION

11/19/84

FEATURE AND DIMENSION LIST

GENERAL ORDER NUMBER CH33095 CCI MADDUX SUP CO TYPE POW-R-PAD
 75.0 KVA. 3 PHASE PAD MOUNTED TRANSFORMER STYLE A65A760X2K 60 HERTZ ERECTION OUTLINE 7146C25

NAMLPLATE DRAWING 8438A54H01 WIRING DIAGRAM IMP= 3.9 PERCENT WT= 2705 LBS. OIL= 165 GAL
 HV 12470
 TAPS + CR - (2) 2 1/2 PERCENT 1ST 13095 2ND 12785 3RD 12470 4TH 12160 5TH 11850
 LV 208Y/120
~~CONDUCTOR=AL BIL 95~~
~~CONDUCTOR=AL BIL 30~~

FEATURES

- 3 PHASE PRIMARY DELTA CONNECTED
 LOOP FEED
- 21 = HV AIR SWITCH OR PROVISION FOR SAME (SELECT SWITCH IN FIELDS 19-20)
 HV BUSHING INTERNALLY CLAMPED
- 25 = TAP CHANGER EXTERNALLY OPERATED FROM HV COMPARTMENT
- 27 = 300 AMP LBOX
- 28 = W 3 POLE EFD AIR SWITCH (15 KV - 95 BIL) WITH (2) #6 TO 4/0 CONNECTORS
 3 PHASE LIVE FRONT LOOP HV PATTERN
- 35 = STANDARD LV BUSHING (EXTERNALLY CLAMPED)
 SPADE LV BUSHING TERMINATION
 STANDARD LOW VOLTAGE SPADE TERMINATION PER ANSI STANDARDS
 LV BUSHINGS, STAGGERED PATTERN, ANSI C57.12.26, FIG 3 & 4A, MIN DIMS
 W CURRENT-LIMITING HV CLT FUSE FOR EFD SWITCH (STANDARD KV APPLICATION
 STANDARD CLT FUSE APPLICATION FOR SINGLE OR CENTER POLE
- 55 = HV LIGHTNING ARRESTER
 10 KV HV LIGHTNING ARRESTER
 STANDARD LIGHTNING ARRESTER LOCATION
 PROVISIONS TO MOUNT TYPE JB AIR BREAKERS
- 65 = THERMOMETER, LIQ LEV GAUGE, VACUUM PR GAUGE LV - DRN VAL W/SAMPLER HV
 3.50 MINIMUM - 9.99 MAXIMUM IMPEDANCE
 MTR 24" DP, 1/2" HEX BOLTS HV DOOR & HANDLE, HINGED IF BAYONET FUSED
 BENELEX TOP AND WALL BARRIERS (INCLUDES HI-LOW BARRIER)
- REFERENCE DRAWING = 7146C25F01

THIS OUTLINE IS FOR ERECTION OR MOUNTING PURPOSES. IT IS NOT TO SCALE AND SHOULD NOT BE REGARDED
 AS INDICATING THE EXACT DETAILS OF CONSTRUCTION.



Westinghouse Electric Corporation

SEND APPROVALS OR INQUIRIES TO:

P. O. Box 32817

Charlotte, N. C. 28232

TRANSMITTAL DATE

S. O. NO.	PROD. CODE	ATTN. ORDER SERVICE REP.	CUST. ORDER NO.	G. O. NO. & DATE-C/N DATE
		B. T. PENDER	84E651	CH-33095-RJ

CUSTOMER	ULTIMATE USER AND/OR MARKINGS
Maddux Supply Co Greenville, N. C.	Southerland Elec Co c/o U. E. P. H. Camp LeJeune, N. C.

<input checked="" type="checkbox"/> FOR APPROVAL, TO MAINTAIN SHIPPING SCHEDULE, APPROVED DWGS, MUST BE RECEIVED BY WESTINGHOUSE ON <u>9/18/84</u>	<input type="checkbox"/> FOR CONSTRUCTION OR INSTALLATION
DRAWINGS ARE IN COMPLIANCE WITH YOUR SPECIFIED REQUIREMENTS, DRAWINGS "APPROVED" OR "APPROVED WITH MODIFICATIONS" AUTHORIZE WESTINGHOUSE TO PROCEED WITH THE MANUFACTURE, MODIFICATIONS NOT IN THE CONTRACT OR MODIFICATIONS MADE DURING OR AFTER DRAWING APPROVAL MAY RESULT IN A PRICE CHANGE AND/OR SHIPMENT DELAY.	THE EQUIPMENT SHOWN ON THESE DRAWINGS(S) HAS BEEN RELEASED FOR MANUFACTURE, ANY MODIFICATION MAY RESULT IN PRICE CHANGE OR SHIPMENT DELAY.
	RPD APPROVAL BY: <input type="checkbox"/>

DRAWINGS				INSTR. BOOKS		RPD		TEST REPORTS	SPECIFIC CUSTOMER INSTRUCTIONS ARE DETAILED IN NOTES
APPROVAL		CONSTRUCTION OR INSTALL.		BND.	UN-BND.	STD.	REC. PRICED		
STD./ SKETCH	PAPER REPRO	PAPER	* REPRO						MAIL DWGS. TO
12		12							Maddux Supply Co Box 4067 Greenville, N. C. 27834 T. Lancaster
1		1						1	RALEIGH OFFICE - L. Vaughan
1		1						1	CHARLOTTE OFFICE - B. T. Pender

AS NOTED
DISAPPROVED
LANTDIV REVIEWER DATE
11 JUL 1985

THIS LINE FOR DIVISION USE ONLY

T/S									
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ITEM	QUANTITY	DESCRIPTION
1	1	75 KVA Transformer, Style A65A760X2K
2	2	300 KVA Transformer, Style A65A530X2L
3	1	150 KVA Transformer, Style A65A490X2M
4	1	112.5 KVA Transformer, Style A65E120X2N

Item 5 Qty 1 500 KVA Transformer, Style A65E560X2P

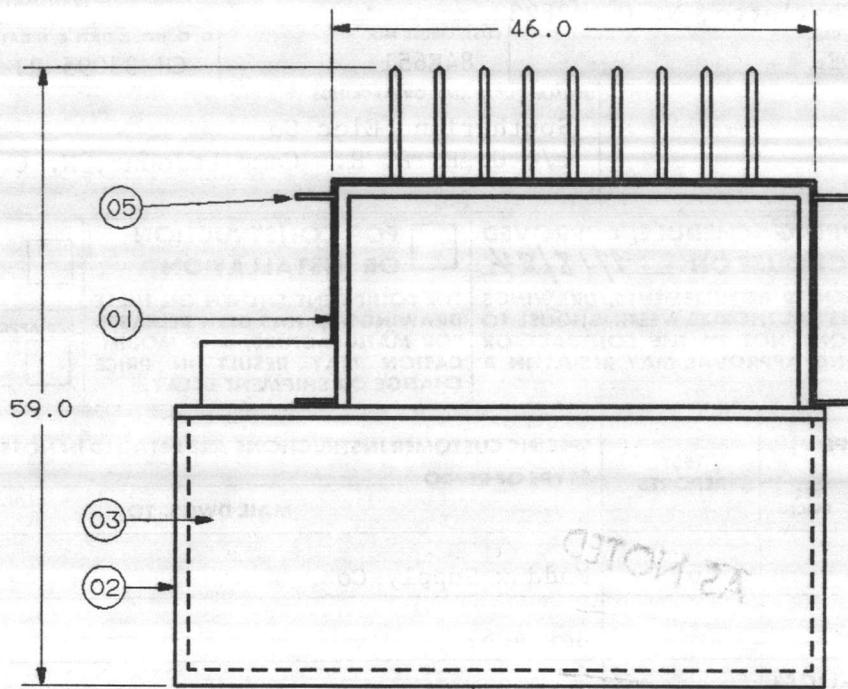
DWG. NO.	SUB	DRAWING TITLE
Item 1	7146C25	Outline 266P347H43 Nameplate
Item 2	7146C26	Outline 266P347H43 Nameplate
Item 3	7146C27	Outline 266P347H43 Nameplate
Item 4	7146C28	Outline 266P347H43 Nameplate
Item 5	7146C29	Outline 266P347H43 Nameplate

APPROVED AS NOTED
DISAPPROVED
SUBJECT TO THE REQUIREMENTS OF CONTRACT NO. 05-82-2244
APPROVAL OF A SUBMITTAL DOES NOT INCLUDE APPROVAL OF ANY DEVIATION FROM THE CONTRACT REQUIREMENTS UNLESS THE CONTRACTOR CALLS ATTENTION TO AND SUPPORTS THE DEVIATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROPER PHYSICAL DIMENSIONS & WEIGHTS, COORDINATION OF TRADES, ETC. AS REQUIRED.
11 JUL 1985
REVIEWER: *RSC* DATE: _____

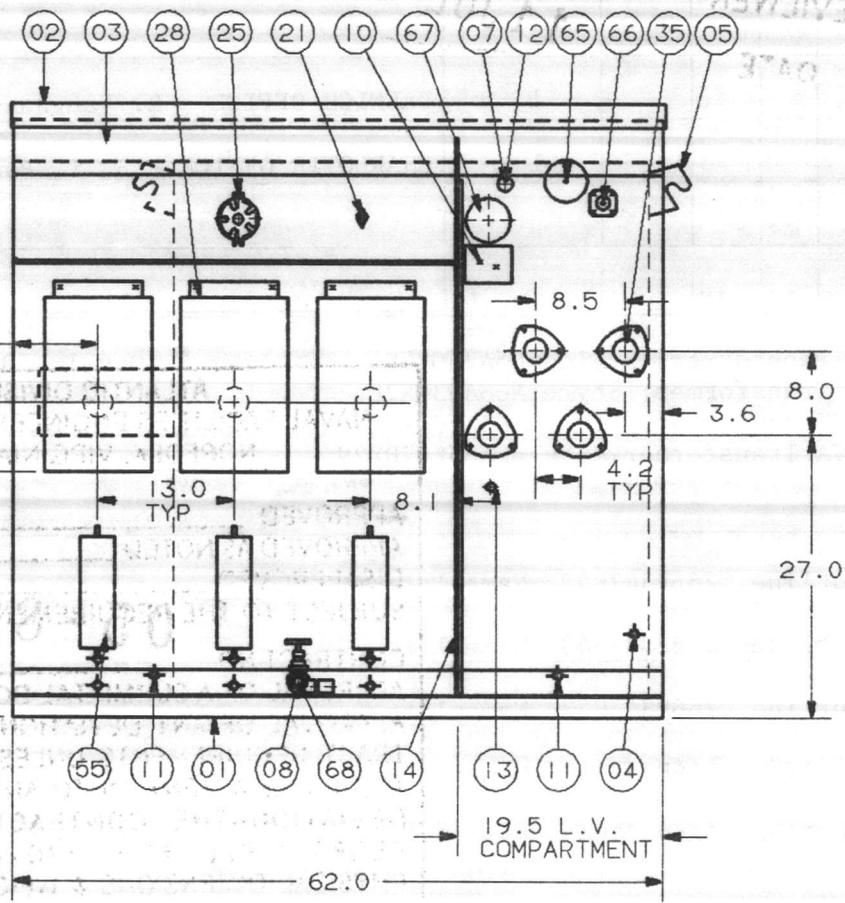
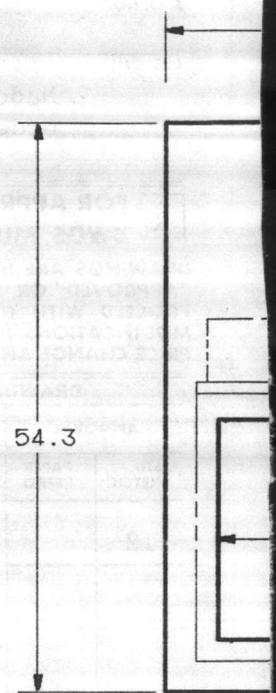
* THIS TRANSMITTAL IS COMPLETE PARTIAL

With Drawings Noted Above Or On Attached Sheet to be sent by *Rosemary Augusten*

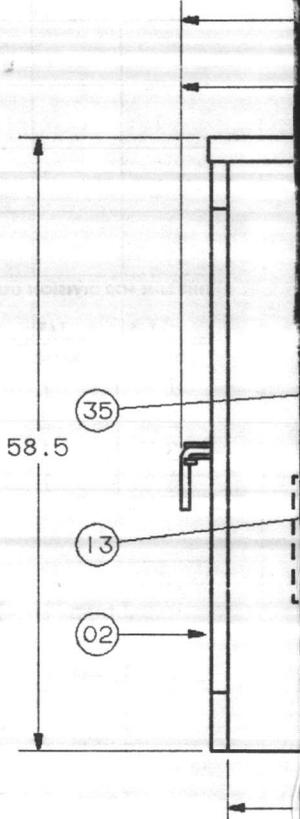
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TOP VIEW



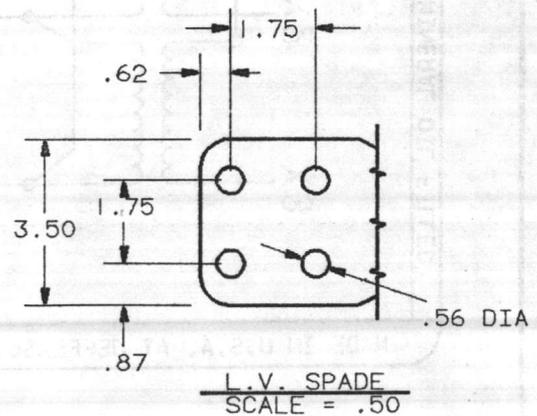
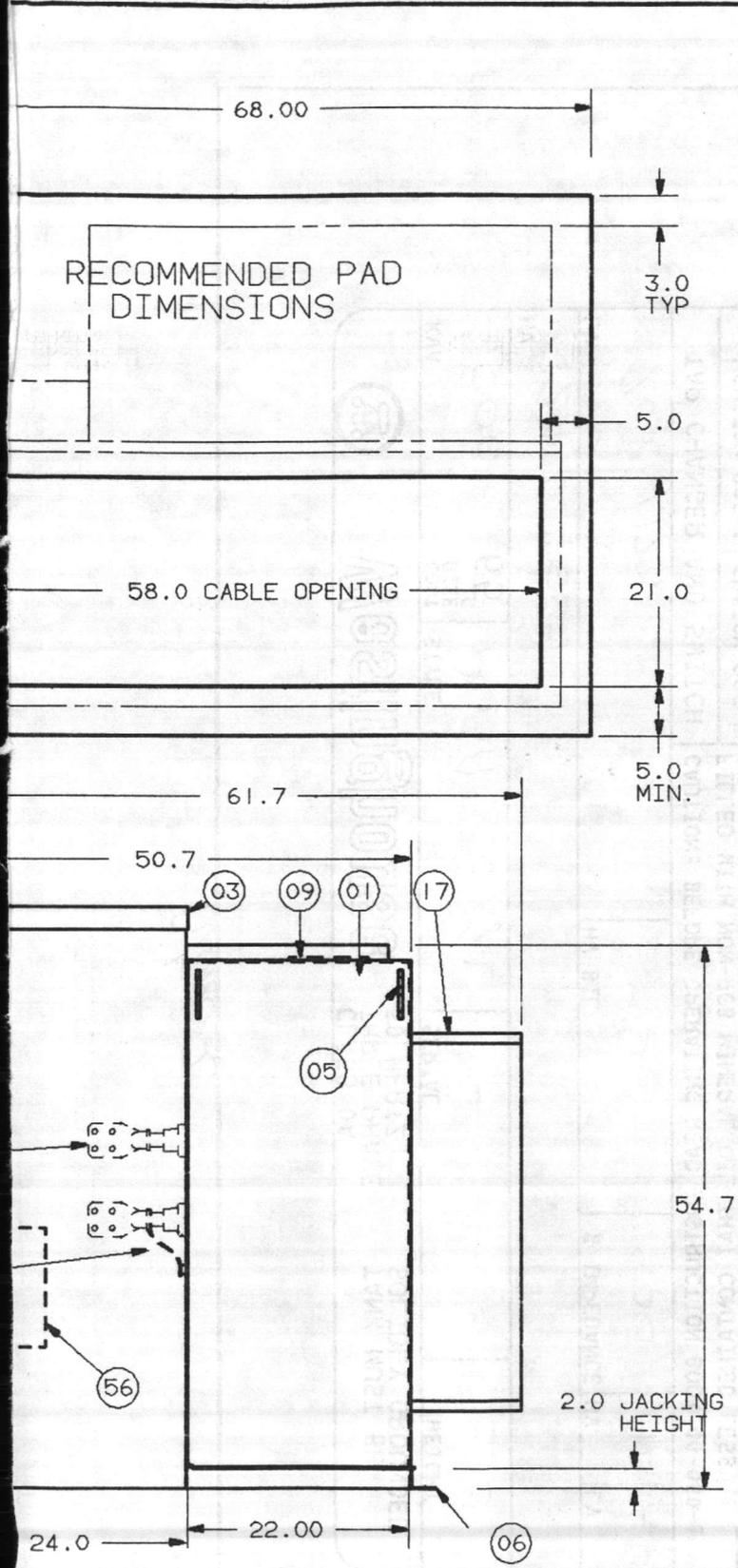
FRONT VIEW



43" OPEN DOOR SWING

THIS OUTLINE IS FOR ERECTION OR MOUNTING PURPOSES. IT IS NOT TO SCALE AND SHOULD NOT BE REGARDED AS INDICATING THE EXACT DETAILS OF CONSTRUCTION.

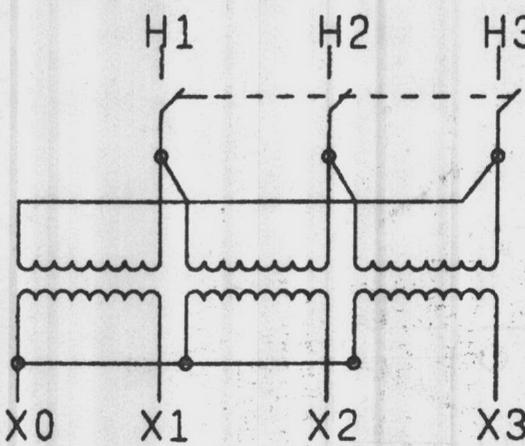
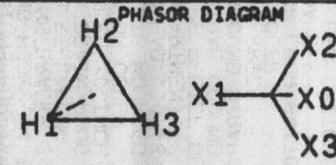
- 01 TANK
- 02 CABINET BOLTED-ON, REMOVABLE SILLS, OPEN BOTTOM 1 INCH FLANGE, HINGED LIFT-OFF DOOR, PROVISION FOR PADLOCK, STOP IN OPEN POSITION.
- 03 WEATHER COVER, REMOVABLE
- 04 PROVISIONS FOR TANK TO CABINET GROUND
- 05 LIFTING HOOKS, 4 TOTAL
- 06 SHIPPING BRACKETS
- 07 1 INCH FILL PLUG
- 08 1 INCH DRAIN PLUG
- 09 HANDHOLE, 10 INCH X 18 INCH, BOLTED-ON COVER
- 10 NAMEPLATE MOUNTED ON TANK WALL
- 11 GROUND PAD .50-13-TAP, HV AND LV COMPARTMENT
- 12 PRESSURE RELIEF DEVICE
- 13 LV NEUTRAL GROUND PAD .50-13-TAP WITH GROUND STRAP
- 14 HV/LV BARRIER
- 17 REAR COOLER
- 21 300 AMP LBOR SWITCH
- 25 TAP CHANGER
- 28 3-POLE EFD SWITCH
- 35 LOW VOLTAGE BUSHING
- 55 10KV LIGHTNING ARRESTOR
- 56 PROVISION TO MOUNT 2 LC3600 BREAKERS
- 65 PRESSURE VACUUM GAUGE
- 66 OIL GAUGE
- 67 THERMOMETER
- 68 DRAIN VALVE WITH SAMPLER



RIGHT VIEW

CUSTOMER: MADDUX SUPPLY CO		WESTINGHOUSE ELECTRIC CORPORATION		REV NO 01
60&ITEM CH33095-002	H.V. 12470 DELTA	TITLE OL3PAAC	DEF XXX FIN XX U/M XX NOTE XX	USER 428
KVA 300	L.V. 208Y/120	DIMENSIONS IN INCHES-SCALE .11 CADAM AAA530210N00000##01,1		
REV DATA		DFTM L. HUESTE	D80284 APPD	7146B26
		D SPEC 42801	APPD	
		ENG. REF XXXXXX	AAA1164530210N00000,1	
		UWD ENGINEERING DEPT. JEFFERSON CITY, MO.		USA

Item 2.

		<h1>Westinghouse</h1>		CLASS 0A THREE PHASE 60 HERTZ		TANK MUST BE SOLIDLY GROUNDDED					
				KVA	CONT RISE $\frac{1}{2}$ °C	STYLE	SERIAL	WEIGHT			
300		65	A65A530X2L	—		3830					
HV 12470 DELTA											
LV 2084/120				HV BIL 95		% IMPEDANCE 4.00	HV AL	LV AL			
TAP CHANGER AND SWITCH				CAUTION: BEFORE OPERATING READ INSTRUCTION BOOK 46-060-1 FILLED WITH NON-PCB MINERAL OIL THAT CONTAINED LESS THAN 1 PPM AT TIME OF MANUFACTURE							
T A P	SWITCH POS 1		SWITCH POS 2								
	VOLTAGE		VOLTAGE								
	1	13095									
	2	12785									
	3	12470									
	4	12160									
5	11850										
				MADE IN U.S.A. AT JEFFERSON CITY, MO.							
266P347H43								DISTRIBUTION TRANSFORMER			
								MINERAL OIL FILLED			

WESTINGHOUSE UNDERGROUND DISTRIBUTION TRANSFORMER DIVISION

11/19/84

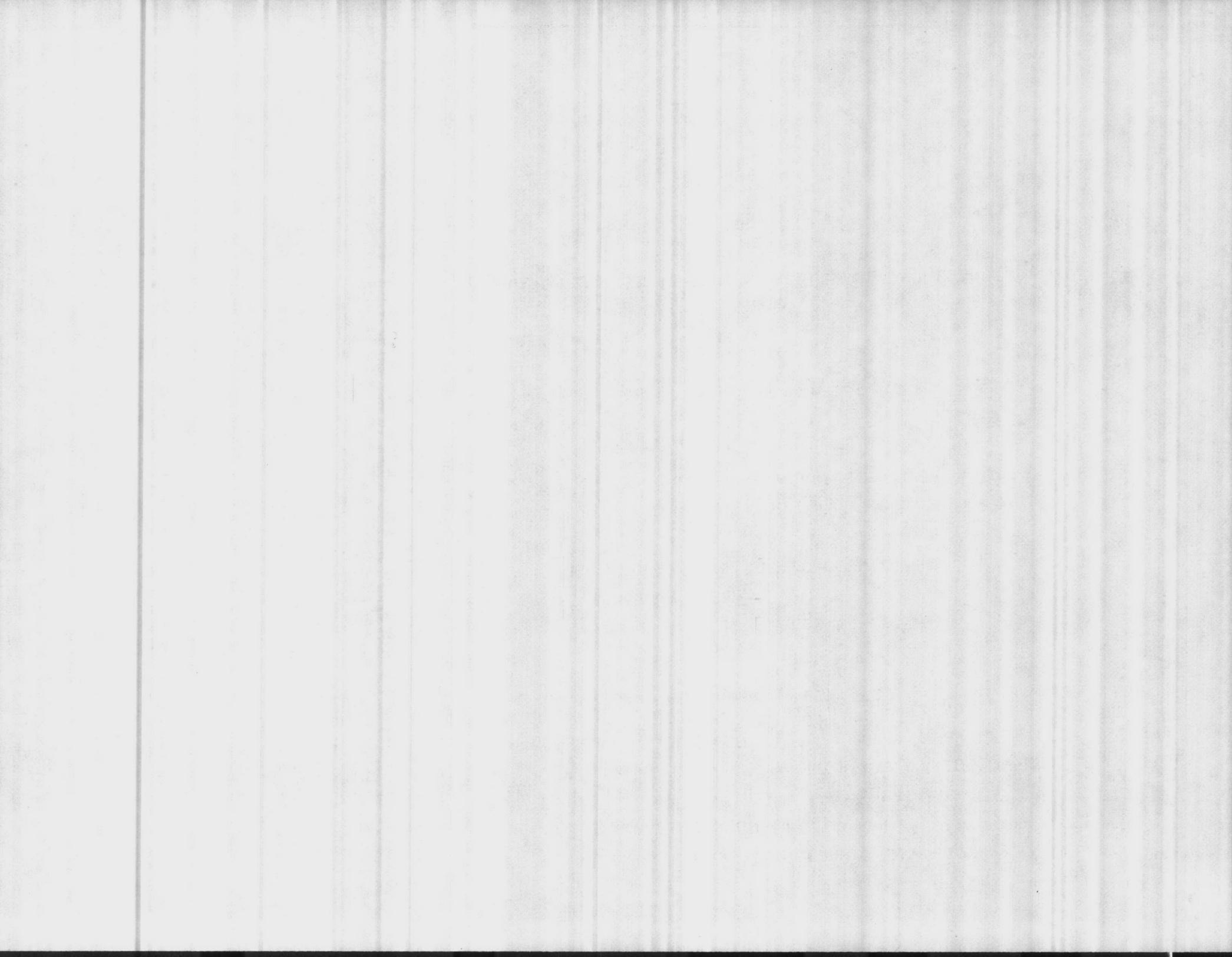
FEATURE AND DIMENSION LIST

GENERAL ORDER NUMBER CH33095 002 MADDUX SUP CO
 300.0 KVA 3 PHASE PAD MOUNTED TRANSFORMER STYLE A65A530XPB 60 HERTZ TYPE POW-R-PAD
 NAMEPLATE DRAWING 8438A54H01 WIRING DIAGRAM IMP= 3.8 PERCENT ERECTION OUTLINE 7146C26
 HV 12470 CONDUCTOR=AL BIL 95 WT=3868 LBS OIL= 190 GAL
 TAPS + CR - (2) 2 1/2 PERCENT 1ST 13095 2ND 12785 3RD 12470 4TH 12160 5TH 11850
 LV 208Y/120 CONDUCTOR=AL BIL 30

FEATURES

- 3 PHASE PRIMARY DELTA CONNECTED
 LOOP FEED
- 21 = HV AIR SWITCH OR PROVISION FOR SAME (SELECT SWITCH IN FIELDS 19-20)
 HV BUSHING INTERNALLY CLAMPED
- 25 = TAP CHANGER EXTERNALLY OPERATED FROM HV COMPARTMENT
- 27 = 500 AMP LBOR
- 28 = W 3 POLE EFD AIR SWITCH (15 KV - 95 BIL) WITH (2) #6 TO 4/0 CONNECTORS
- 35 = 3 PHASE LIVE FRONT LOOP HV PATTERN
 STANDARD LV BUSHING (EXTERNALLY CLAMPED)
 SPADE LV BUSHING TERMINATION
 STANDARD LOW VOLTAGE SPADE TERMINATION PER ANSI STANDARDS
 LV BUSHINGS, STAGGERED PATTERN, ANSI C57.12.26, FIG 3 & 4A, MIN DIMS
 W CURRENT-LIMITING HV CLT FUSE FOR EFD SWITCH (STANDARD KV APPLICATION)
- 55 = STANDARD CLT FUSE APPLICATION FOR SINGLE OR CENTER POLE
 HV LIGHTNING ARRESTER
 10 KV HV LIGHTNING ARRESTER
 STANDARD LIGHTNING ARRESTER LOCATION
 PROVISIONS TO MOUNT TYPE LC AIR BREAKER
- 65 = THERMOMETER, LIQ LEV GAUGE, VACUUM PR GAUGE LV - DRN VAL W/SAMPLER HV
- 85 = UNDRILLED PLATE FOR MOUNTING CURRENT OR POTENTIAL TRANSFORMERS
 3.50 MINIMUM - 9.99 MAXIMUM IMPEDANCE
 MTR 24" DP, 1/2" HEX EGLTS HV DOOR & HANDLE, HINGED IF BAYONET FUSED
 BENELEX TOP AND WALL BARRIERS (INCLUDES HI-LOW BARRIER)
- REFERENCE DRAWING = 7146C26F01

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 AS INDICATING THE EXACT DETAILS OF CONSTRUCTION.



Westinghouse Electric Corporation

SEND APPROVALS OR INQUIRIES TO:

P. O. Box 32817
Charlotte, N. C. 28232

TRANSMITTAL DATE

S. O. NO.	PROD. CODE	ATTN. ORDER SERVICE REP. B. T. PENDER	CUST. ORDER NO. 84E651	G. O. NO. & DATE-C/N DATE CH-33095-RJ
CUSTOMER Maddux Supply Co Greenville, N. C.			ULTIMATE USER AND/OR MARKINGS Southerland Elec Co c/o U. E. P. H. Camp LeJeune, N. C.	

<input checked="" type="checkbox"/> FOR APPROVAL, TO MAINTAIN SHIPPING SCHEDULE, APPROVED DWGS, MUST BE RECEIVED BY WESTINGHOUSE ON <u>9/18/84</u>	<input type="checkbox"/> FOR CONSTRUCTION OR INSTALLATION	<input type="checkbox"/>
DRAWINGS ARE IN COMPLIANCE WITH YOUR SPECIFIED REQUIREMENTS, DRAWINGS "APPROVED" OR "APPROVED WITH MODIFICATIONS" AUTHORIZE WESTINGHOUSE TO PROCEED WITH THE MANUFACTURE, MODIFICATIONS NOT IN THE CONTRACT OR MODIFICATIONS MADE DURING OR AFTER DRAWING APPROVAL MAY RESULT IN A PRICE CHANGE AND/OR SHIPMENT DELAY.		THE EQUIPMENT SHOWN ON THESE DRAWINGS(S) HAS BEEN RELEASED FOR MANUFACTURE, ANY MODIFICATION MAY RESULT IN PRICE CHANGE OR SHIPMENT DELAY.
		RPD APPROVAL BY: <input type="checkbox"/>

DRAWINGS				INSTR. BOOKS		RPD		TEST REPORTS	SPECIFIC CUSTOMER INSTRUCTIONS ARE DETAILED IN NOTES
APPROVAL		CONSTRUCTION OR INSTALL.		BND.	UN-BND.	STD.	REC. PRICED		
STD. / SKETCH	PAPER REPRO	PAPER	* REPRO						MAIL DWGS. TO
12		12						AS NOTED 6	Maddux Supply Co Box 4067 Greenville, N. C. 27834 Attn: T. Lancaster
1		1						1	RALEIGH OFFICE - L. Vaughan
1		1						1	CHARLOTTE OFFICE - B. T. Pender

THIS LINE FOR DIVISION USE ONLY

T/S									
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ITEM	QUANTITY	DESCRIPTION
1	1	75 KVA Transformer, Style A65A760X2K
2	2	300 KVA Transformer, Style A65A530X2L
3	1	150 KVA Transformer, Style A65A490X2M
4	1	112.5 KVA Transformer, Style A65E120X2P

DWG. NO.	SUB	DRAWING TITLE
Item 1	7146C25	Outline 266P347H43 Nameplate
Item 2	7146C26	Outline 266P347H43 Nameplate
Item 3	7146C27	Outline 266P347H43 Nameplate
Item 4	7146C28	Outline 266P347H43 Nameplate
Item 5	7146C29	Outline 266P347H43 Nameplate

ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
FPO 500 VIRG 23511
NORFOLK, VIRGINIA

APPROVED AS NOTED
DISAPPROVED

SUBJECT TO THE REQUIREMENTS OF CONTRACT NO. **05-82-2244**

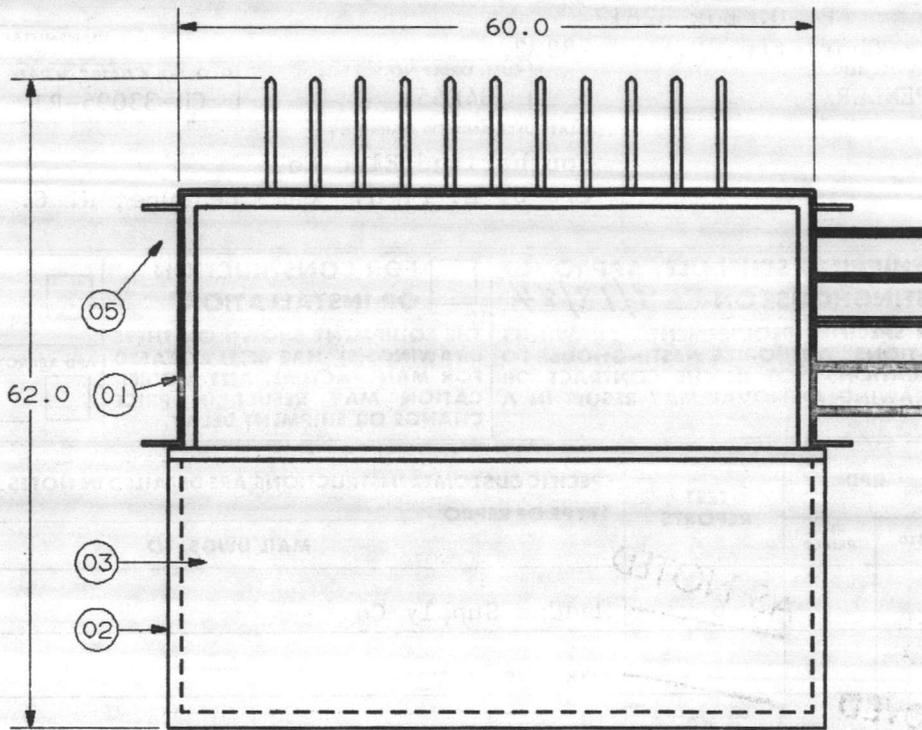
APPROVAL OF A SUBMITTAL DOES NOT INCLUDE APPROVAL OF ANY DEVIATION FROM THE CONTRACT REQUIREMENTS UNLESS THE CONTRACTOR CALLS ATTENTION TO AND SUPPORTS THE DEVIATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROPER PHYSICAL DIMENSIONS & WEIGHTS, COORDINATION OF TRADES, ETC., AS REQUIRED.

REVIEWER: *J.E.C.* DATE: **11 JUL 1985**

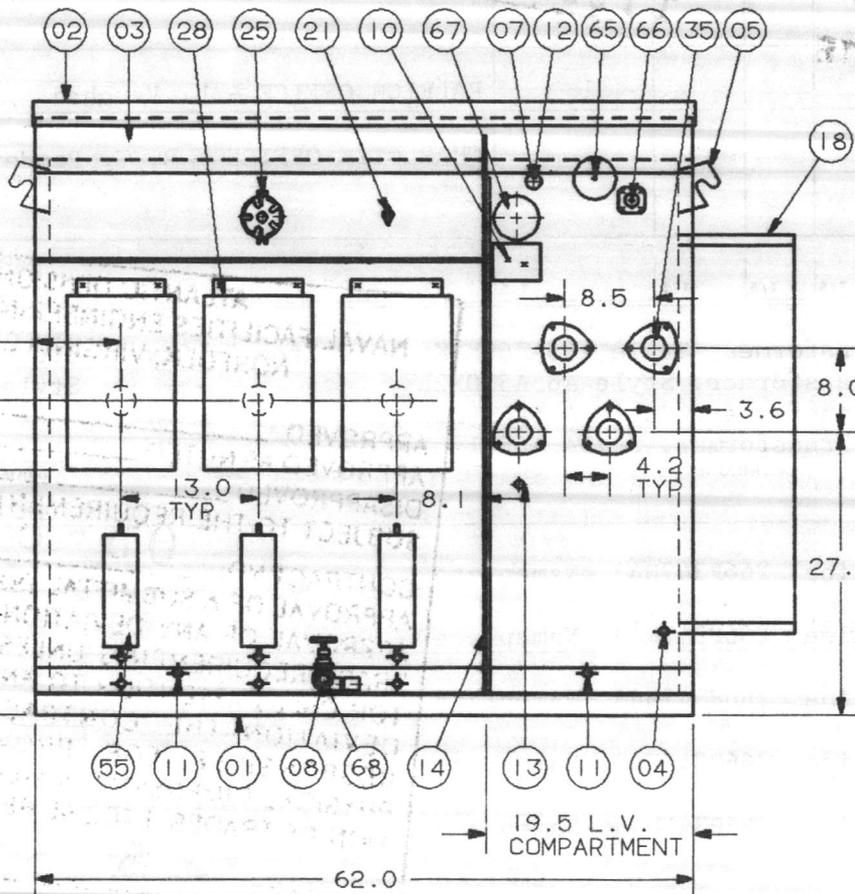
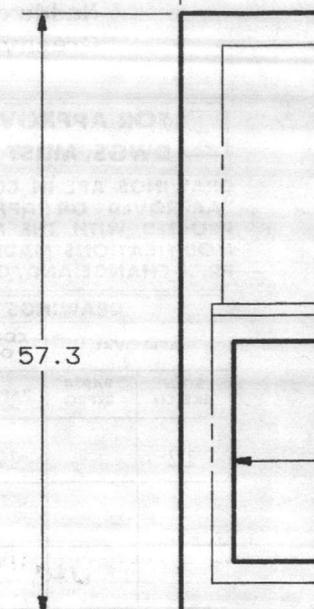
FOR OFFICER IN CHARGE OF CONSTRUCTION

* THIS TRANSMITTAL IS COMPLETE PARTIAL With Drawings Noted Above Or On Attached Sheet to be sent by *Rosemary Augustine*

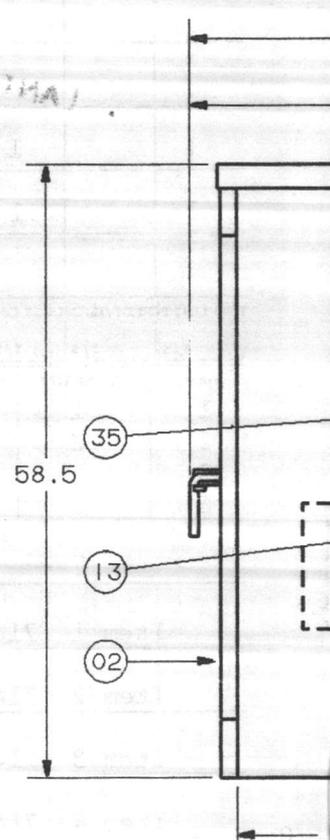
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TOP VIEW



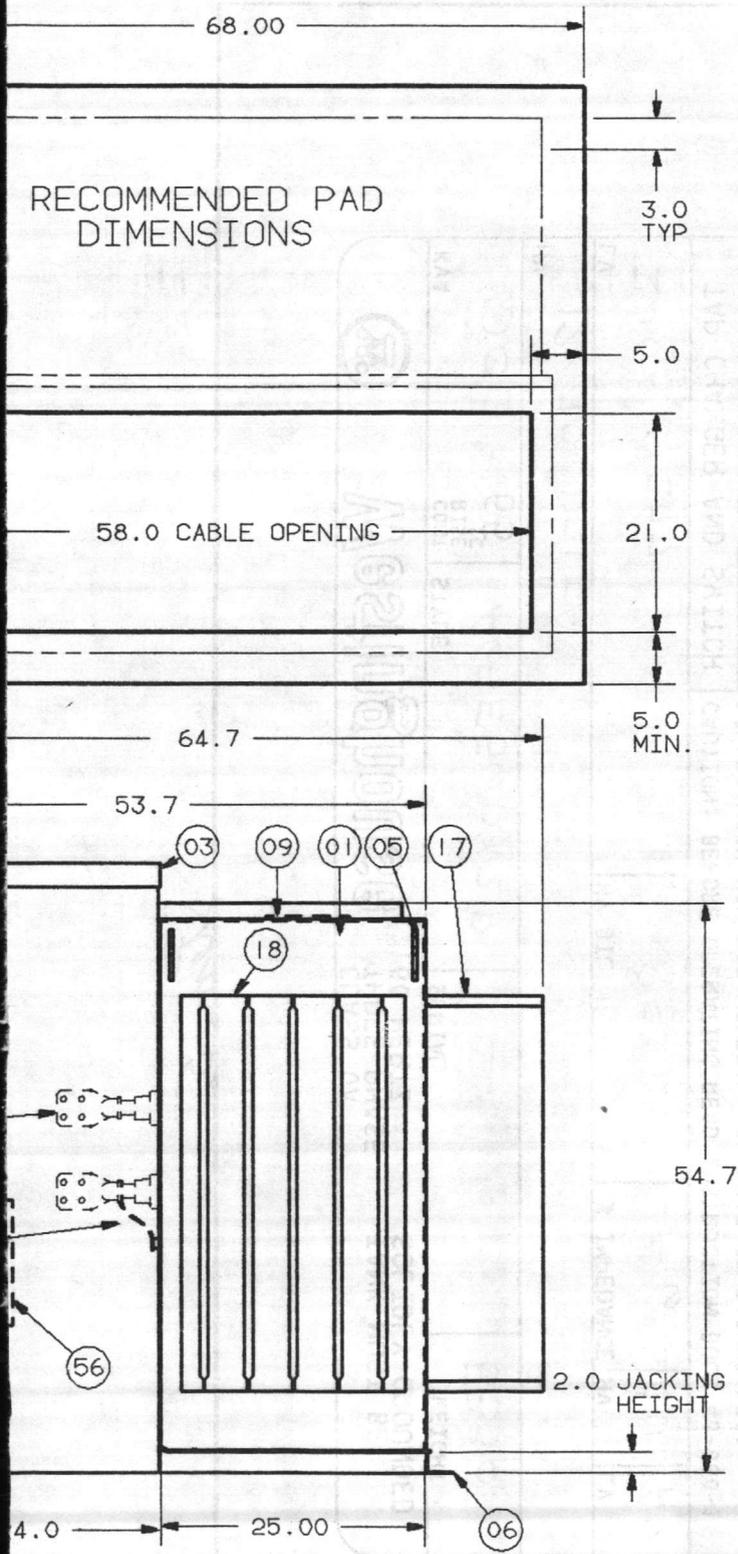
FRONT VIEW



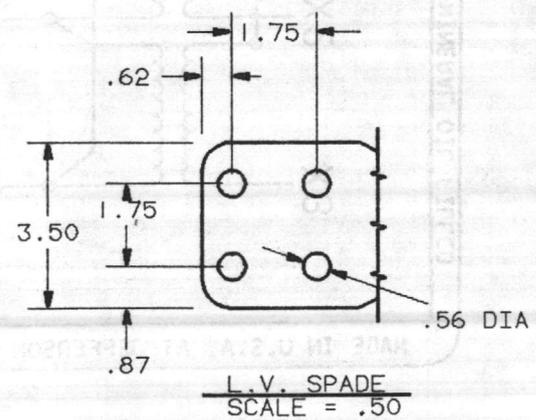
43" OPEN DOOR SWING

THIS OUTLINE IS FOR ERECTION OR MOUNTING PURPOSES. IT IS NOT TO SCALE AND SHOULD NOT BE REGARDED AS INDICATING THE EXACT DETAILS OF CONSTRUCTION.

RECOMMENDED PAD DIMENSIONS



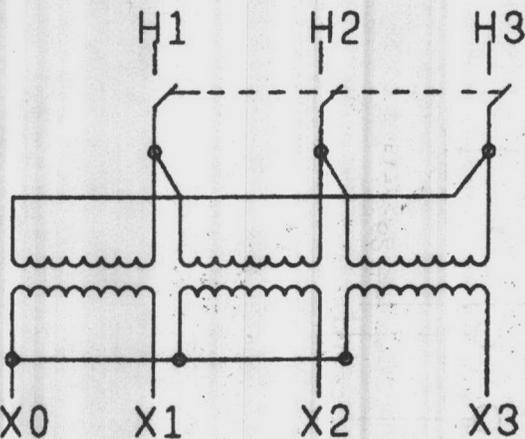
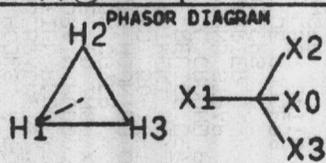
- 01 TANK
- 02 CABINET BOLTED-ON, REMOVABLE SILLS, OPEN BOTTOM 1 INCH FLANGE, HINGED LIFT-OFF DOOR, PROVISION FOR PADLOCK, STOP IN OPEN POSITION.
- 03 WEATHER COVER, REMOVABLE
- 04 PROVISIONS FOR TANK TO CABINET GROUND
- 05 LIFTING HOOKS, 4 TOTAL
- 06 SHIPPING BRACKETS
- 07 1 INCH FILL PLUG
- 08 1 INCH DRAIN PLUG
- 09 HANDHOLE, 10 INCH X 18 INCH, BOLTED-ON COVER
- 10 NAMEPLATE MOUNTED ON TANK WALL
- 11 GROUND PAD .50-13-TAP, HV AND LV COMPARTMENT
- 12 PRESSURE RELIEF DEVICE
- 13 LV NEUTRAL GROUND PAD .50-13-TAP WITH GROUND STRAP
- 14 HV/LV BARRIER
- 17 REAR COOLERS
- 18 RIGHT SIDE COOLERS
- 21 300 AMP LBOR SWITCH
- 25 TAP CHANGER
- 28 3-POLE EFD SWITCH
- 35 LOW VOLTAGE BUSHING
- 55 10KV LIGHTNING ARRESTOR
- 56 PROVISION TO MOUNT 1 MC3800 BREAKER
- 65 PRESSURE VACUUM GAUGE
- 66 OIL GAUGE
- 67 THERMOMETER
- 68 DRAIN VALVE WITH SAMPLER



RIGHT VIEW

CUSTOMER: MADDUX SUPPLY CO		WESTINGHOUSE ELECTRIC CORPORATION		REV NO 01
GO&ITEM CH33095-005	H.V. 12470 DELTA	TITLE OL3PAAC	DEF XXX FIN XX U/M XX NOTE XX	
KVA 500	L.V. 480Y/277	DES XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		USER 183
REV DATA		DIMENSIONS IN INCHES-SCALE .11		CADAM AAA560210ND0000##01.1
		DFTM L. HUESTE	080284	APPD
		D SPEC 42801	APPD	
		ENG. REF XXXXXX	AAA1164530210ND0000.1	7146B29
		UDTD ENGINEERING DEPT.		JEFFERSON CITY, MO. USA

Item 5.

 Westinghouse		CLASS 0A THREE PHASE 60 HERTZ		TANK MUST BE SOLIDLY GROUNDED	
KVA	CONT RISE % °C	STYLE	SERIAL	WEIGHT	
500	65	A65E560X2P	—	5330	
HV. 12470 DELTA					
LV		HV BIL	% IMPEDANCE	HV	LV
480 Y/277		95	4.6	CU	AL
TAP CHANGER AND SWITCH		CAUTION: BEFORE OPERATING READ INSTRUCTION BOOK 46-060-1 FILLED WITH NON-PCB MINERAL OIL THAT CONTAINED LESS THAN 1 PPM AT TIME OF MANUFACTURE			
T A P	SWITCH POS 1	SWITCH POS 2			
	VOLTAGE	VOLTAGE			
1	13095				
2	12785				
3	12470				
4	12160				
5	11850				
PHASOR DIAGRAM 			MADE IN U.S.A. AT JEFFERSON CITY, MO.		
266P347H43 DISTRIBUTION TRANSFORMER MINERAL OIL FILLED					

FEATURE AND DIMENSION LIST

GENERAL ORDER NUMBER CH33095 005 MADDUX SUP CO TYPE POW-R-PAD
 500.0 KVA 3 PHASE PAD MOUNTED TRANSFORMER STYLE A65L560XP9 60 HERTZ ERECTION OUTLINE 7146C29
 NAMEPLATE DRAWING 8438A54H01 WIRING DIAGRAM IMP= 4.8 PERCENT WT=~~5358~~ LBS OIL= 285 GAL
 HV 12470 CONDUCTOR=~~CU~~ BIL 95
 TAPS + CR - (2) 2 1/2 PERCENT 1ST 13095 2ND 12785 3RD 12470 4TH 12160 5TH 11850
 LV 480Y/277 CONDUCTOR=~~AL~~ BIL 30

FEATURES

- 3 PHASE PRIMARY DELTA CONNECTED
 LOOP FEED
- 21 = HV AIR SWITCH OR PROVISION FOR SAME (SELECT SWITCH IN FIELDS 19-20)
 HV BUSHING INTERNALLY CLAMPED
- 25 = TAP CHANGER EXTERNALLY OPERATED FROM HV COMPARTMENT
- 27 = 300 AMP LBOR
- 28 = W 3 POLE EFD AIR SWITCH (15 KV - 95 BIL) WITH (2) #6 TO 4/0 CONNECTORS
 3 PHASE LIVE FRONT LOOP HV PATTERN
- 35 = STANDARD LV BUSHING (EXTERNALLY CLAMPED)
 SPADE LV BUSHING TERMINATION
 STANDARD LOW VOLTAGE SPADE TERMINATION PER ANSI STANDARDS
 LV BUSHINGS, STAGGERED PATTERN, ANSI C57.12.26, FIG 3 & 4A, MIN DIMS
 W CURRENT-LIMITING HV CLT FUSE FOR EFD SWITCH (STANDARD KV APPLICATION
 STANDARD CLT FUSE APPLICATION FOR SINGLE OR CENTER POLE
- 55 = HV LIGHTNING ARRESTER
 10 KV HV LIGHTNING ARRESTER
 STANDARD LIGHTNING ARRESTER LOCATION
 PROVISIONS FOR MOUNTING ONE MC3800 AIR BREAKER FIELD MOUNTED
- 65 = THERMUMETER, LIQ LEV GAUGE, VACUUM PR GAUGE LV - DRN VAL W/SAMPLER HV
 3.50 MINIMUM - 9.99 MAXIMUM IMPEDANCE
 MTR 24" DP, 1/2" HEX BGLTS HV DOOR & HANDLE, HINGED IF BAYONET FUSED
- REFERENCE DRAWING = 7146C29F01

THIS OUTLINE IS FOR ERECTION OR MOUNTING PURPOSES. IT IS NOT TO SCALE AND SHOULD NOT BE REGARDED AS INDICATING THE EXACT DETAILS OF CONSTRUCTION.



Westinghouse Electric Corporation

SEND APPROVALS OR INQUIRIES TO:

P. O. Box 32817
Charlotte, N. C. 28232

TRANSMITTAL DATE

S. O. NO.	PROD. CODE	ATTN. ORDER SERVICE REP. B. T. PENDER	CUST. ORDER NO. 84E651	G. O. NO. & DATE-C/N DATE CH-33095-RJ
CUSTOMER Maddux Supply Co Greenville, N. C.			ULTIMATE USER AND/OR MARKINGS Southerland Elec Co c/o U. E. P. H. Camp LeJeune, N. C.	

<input checked="" type="checkbox"/> FOR APPROVAL, TO MAINTAIN SHIPPING SCHEDULE, APPROVED DWGS, MUST BE RECEIVED BY WESTINGHOUSE ON <u>9/18/84</u>	<input type="checkbox"/> FOR CONSTRUCTION OR INSTALLATION
DRAWINGS ARE IN COMPLIANCE WITH YOUR SPECIFIED REQUIREMENTS, DRAWINGS "APPROVED" OR "APPROVED WITH MODIFICATIONS" AUTHORIZE WESTINGHOUSE TO PROCEED WITH THE MANUFACTURE, MODIFICATIONS NOT IN THE CONTRACT OR MODIFICATIONS MADE DURING OR AFTER DRAWING APPROVAL MAY RESULT IN A PRICE CHANGE AND/OR SHIPMENT DELAY.	THE EQUIPMENT SHOWN ON THESE DRAWINGS(S) HAS BEEN RELEASED FOR MANUFACTURE, ANY MODIFICATION MAY RESULT IN PRICE CHANGE OR SHIPMENT DELAY.
RPD APPROVAL BY: 	

DRAWINGS				INSTR. BOOKS		RPD		TEST REPORTS	SPECIFIC CUSTOMER INSTRUCTIONS ARE DETAILED IN NOTES *TYPE OF REPRO
APPROVAL		CONSTRUCTION OR INSTALL.		BND.	UN-BND.	STD.	REC. PRICED		
STD./SKETCH	PAPER REPRO	PAPER	* REPRO						
12		12						6 AS NOTED	Maddux Supply Co Box 4067 Greenville, N. C. 27834 Attn: T. Lancaster
1								1	RALEIGH OFFICE - L. Vaughan
1		1						1	CHARLOTTE OFFICE - B. T. Pender

THIS LINE FOR DIVISION USE ONLY

ITEM	QUANTITY	DESCRIPTION
1	1	75 KVA Transformer, Style A65A760X2K
2	2	300 KVA Transformer, Style A65A530X2L
3	1	150 KVA Transformer, Style A65A490X2M
4	1	112.5 KVA Transformer, Style A65E120X2N

DWG. NO.	SUB	DRAWING TITLE
Item 1	7146C25	Outline 266P347H43 Nameplate
Item 2	7146C26	Outline 266P347H43 Nameplate
Item 3	7146C27	Outline 266P347H43 Nameplate
Item 4	7146C28	Outline 266P347H43 Nameplate
Item 5	7146C29	Outline 266P347H43 Nameplate

ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511

Item 5 Qty 1 500 KVA Transformer, Style A65E560X2P

APPROVED AS NOTED

DISAPPROVED

SUBJECT TO THE REQUIREMENTS OF THE

CONTRACT NO. **05-82-2244**

APPROVAL OF A SUBMITTAL DOES NOT INCLUDE APPROVAL OF ANY DEVIATION FROM THE CONTRACT REQUIREMENTS UNLESS THE CONTRACTOR CALLS ATTENTION TO AND SUPPORTS THE DEVIATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROPER PHYSICAL DIMENSIONS & WEIGHTS, COORDINATION OF TRADES, ETC., AS REQUIRED.

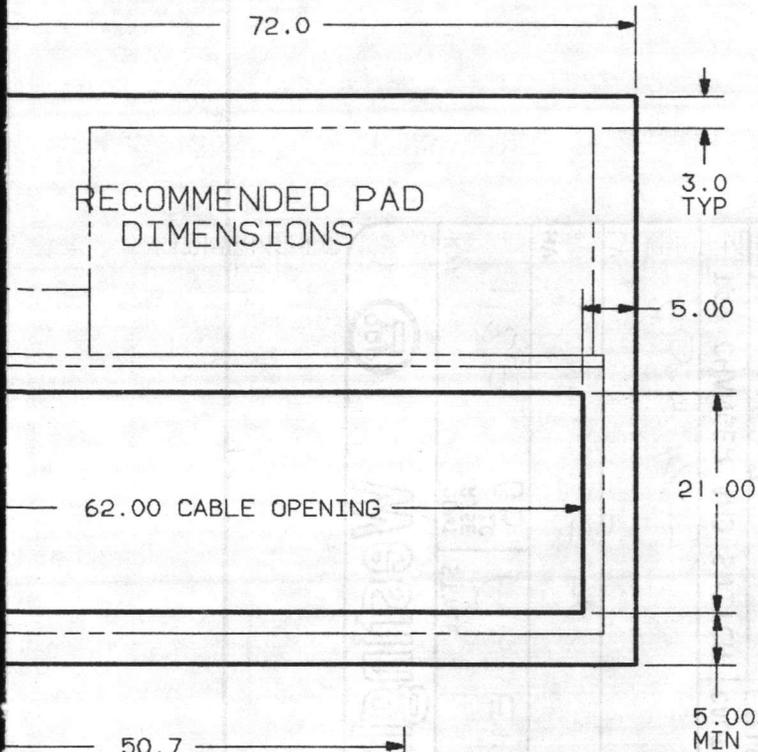
REVIEWER: **JEC** DATE: **11 JUL 1985**

FOR APPROVAL BY: **ROSEMARY AUGUSTINE**

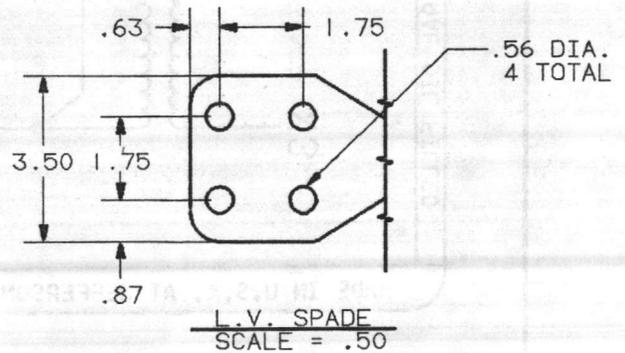
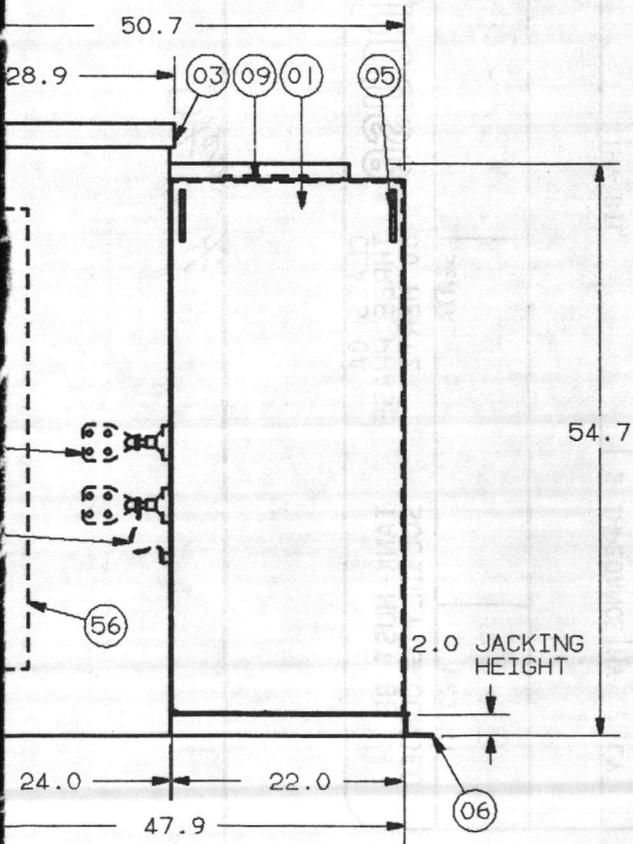
* THIS TRANSMITTAL IS COMPLETE PARTIAL With Drawings Noted Above Or On Attached Sheet to be sent by *Rosemary Augustine*

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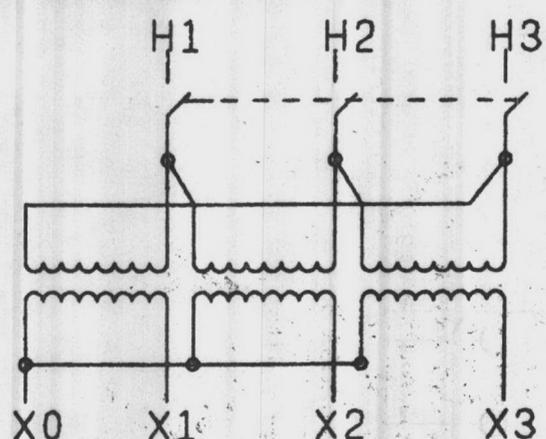
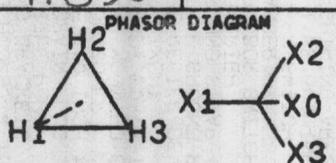
- 01 TANK
- 02 CABINET BOLTED-ON, REMOVABLE SILLS, OPEN BOTTOM 1 INCH FLANGE, HINGED LIFT-OFF DOOR, PROVISION FOR PADLOCK, STOP IN OPEN POSITION.
- 03 WEATHER COVER, REMOVABLE
- 04 PROVISIONS FOR TANK TO CABINET GROUND
- 05 LIFTING HOOKS, 4 TOTAL
- 06 SHIPPING BRACKETS
- 07 1 INCH FILL PLUG
- 08 1 INCH DRAIN PLUG
- 09 HANDHOLE, 10 INCH X 18 INCH, BOLTED-ON COVER
- 10 NAMEPLATE MOUNTED ON TANK WALL
- 11 GROUND PAD .50-13-TAP, HV AND LV COMPARTMENT
- 12 PRESSURE RELIEF DEVICE
- 13 LV NEUTRAL GROUND PAD .50-13-TAP WITH GROUND STRAP
- 14 HV/LV BARRIER
- 21 300 AMP LBOR SWITCH
- 25 TAP CHANGER
- 28 3-POLE EFD SWITCH
- 35 LOW VOLTAGE BUSHING
- 55 10KV LIGHTNING ARESSTOR
- 56 PROVISION FOR MOUNTING WEHB 20X PANELBOARD
- 65 PRESSURE VACUUM GAUGE
- 66 OIL GAUGE
- 67 THERMOMETER
- 68 DRAIN VALVE WITH SAMPLER



RIGHT VIEW

CUSTOMER: MADDUX SUPPLY CO		WESTINGHOUSE ELECTRIC CORPORATION		REV NO 01
GO&ITEM CH33095-004	H.V. 12470 DELTA	TITLE DL3PAAC	DEF XXX FIN XX U/M XX NOTE XX	
KVA 112.5	L.V. 480Y/277	DES XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		USER 183
REV DATA		DIMENSIONS IN INCHES-SCALE .11 CADAM AAA 20210N00000##01.1		7146C28
		DFTM L. HUESTE	080284 APPD	
		D SPEC 42801	APPD	
		ENG. REF XXXXXX AAA1099490210N00000.1		
		UDTD ENGINEERING DEPT. JEFFERSON CITY, MO.		USA

Item 4.

 Westinghouse		CLASS 0A THREE PHASE 60 HERTZ		TANK MUST BE SOLIDLY GROUND	
KVA	CONT RISE °C	STYLE	SERIAL	WEIGHT	
112.5	65	A65E120X2N	-	3255	
HV 12470 DELTA					
LV 480Y/277		HV BIL 95	% IMPEDANCE 4.30	HV CU	LV AL
TAP CHANGER AND SWITCH			CAUTION: BEFORE OPERATING READ INSTRUCTION BOOK 46-060-1 FILLED WITH NON-PCB MINERAL OIL THAT CONTAINED LESS THAN 1 PPM AT TIME OF MANUFACTURE		
T A P	SWITCH POS 1	SWITCH POS 2			
	VOLTAGE	VOLTAGE			
1	13095				
2	12785				
3	12470				
4	12160				
5	11850				
PHASOR DIAGRAM 			MADE IN U.S.A. AT JEFFERSON CITY, MO.		
266P347H43 DISTRIBUTION TRANSFORMER MINERAL OIL FILLED					

WESTINGHOUSE UNDERGROUND DISTRIBUTION TRANSFORMER DIVISION

11/19/84

FEATURE AND DIMENSION LIST

GENERAL ORDER NUMBER CH33095 004 MADDUX SUP CO TYPE POW-R-PAD
 112.5 KVA 3 PHASE PAD MOUNTED TRANSFORMER STYLE A65E120X2N 60 HERTZ ERECTION OUTLINE 7146C28
 NAMEPLATE DRAWING 8438A54H01 WIRING DIAGRAM IMP= 3.2 PERCENT WT=3287 LBS OIL= 205 GAL
 HV 12470 CONDUCTOR=CU BIL 95
 TAPS + OR - (2) 2 1/2 PERCENT 1ST 13095 2ND 12785 3RD 12470 4TH 12160 5TH 11650
 LV 480Y/277 CONDUCTOR=AL BIL 30

FEATURES

- 3 PHASE PRIMARY DELTA CONNECTED
- LOOP FEED
- 21 = HV AIR SWITCH OR PROVISION FOR SAME (SELECT SWITCH IN FIELDS 19-20)
- 25 = HV BUSHING INTERNALLY CLAMPED
- 27 = TAP CHANGER EXTERNALLY OPERATED FROM HV COMPARTMENT
- 28 = 300 AMP LBOR
- 28 = W 3 POLE EFD AIR SWITCH (15 KV - 95 BIL) WITH (2) #6 TO 4/0 CONNECTORS
- 35 = 3 PHASE LIVE FRONT LOOP HV PATTERN
- STANDARD LV BUSHING (EXTERNALLY CLAMPED)
- SPADE LV BUSHING TERMINATION
- STANDARD LOW VOLTAGE SPADE TERMINATION PER ANSI STANDARDS
- LV BUSHINGS, STAGGERED PATTERN, ANSI C57.12.26, FIG 3 & 4A, MIN DIMS
- W CURRENT-LIMITING HV CLT FUSE FOR EFD SWITCH (STANDARD KV APPLICATION)
- STANDARD CLT FUSE APPLICATION FOR SINGLE OR CENTER POLE
- 55 = HV LIGHTNING ARRESTER
- 10 KV HV LIGHTNING ARRESTER
- STANDARD LIGHTNING ARRESTER LOCATION
- PROVISIONS FOR WEHB PANEL MODULE 20X
- 65 = THERMOMETER, LIQ LEV GAUGE, VACUUM PR GAUGE LV - DRN VAL W/SAMPLER HV
- 3.50 MINIMUM - 9.99 MAXIMUM IMPEDANCE
- MTR 24" DP, 1/2" HEX BOLTS HV DOOR & HANDLE, HINGED IF BAYONET FUSED
- REFERENCE DRAWING = 7146C28FC1

THIS OUTLINE IS FOR ERECTION OR MOUNTING PURPOSES. IT IS NOT TO SCALE AND SHOULD NOT BE REGARDED AS INDICATING THE EXACT DETAILS OF CONSTRUCTION.



Instructions for Oil-Immersed Distribution Transformers



I.B. 46-060-1
Section D

Section D: Pad-Mounted, 75-1500 KVA, Three-Phase

AS NOTED

GENERAL

These instructions apply to three-phase oil-immersed pad-mounted distribution transformers. Read these instructions carefully before attempting to install, operate, maintain, or store the transformers.

The equipment covered by these instructions should be operated and serviced only by competent personnel familiar with good safety practices. These instructions are written for such personnel and are not intended as a substitute for adequate training and experience in the use of this equipment. These instructions do not purport to provide for every possible contingency that might be encountered in the installation, operation and maintenance of this equipment. Should clarification or further information be required or should problems arise which are not covered sufficiently for the user's purposes, refer the matter to the Westinghouse Electric Corporation.

Westinghouse is not responsible for the adequacy of instructions provided by suppliers of non-Westinghouse components which may be incorporated in this equipment and any additional information required should be obtained from such suppliers.

INTRODUCTION

The three-phase pad-mounted transformer is designed to provide service for such electrical underground distribution as shopping centers, schools, institutions and industrial plants. The transformer is designed for outdoor mounting on a pad. Primary and secondary cables enter the transformer from below, through openings in the pad. All live parts are completely enclosed in tamper-resistant compartments with provision for locking.

RECEIVING

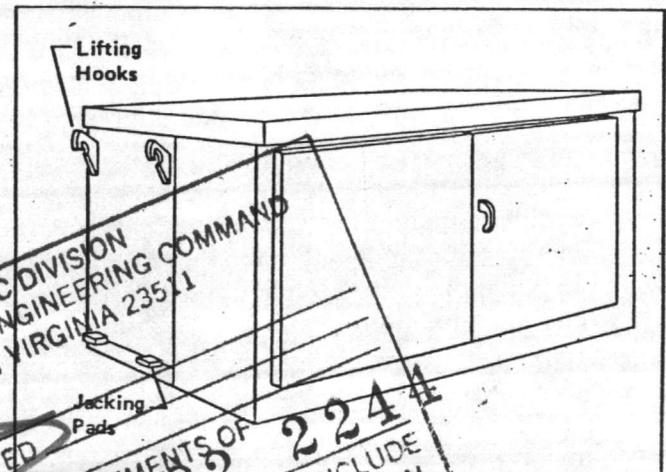
Westinghouse three-phase pad-mounted distribution transformers are normally shipped completely assembled and ready to install. Each transformer should be carefully inspected upon receipt and the transportation company notified of any damage that has been incurred. The shipping list should be checked for possible shortages.

Three-phase transformers rated 500 kVA and below are shipped on a pallet, being securely attached to the pallet by means of straps banded to the lifting lugs. Palletized transformers in these ratings may be moved readily by a lift truck, crane, or cart. The lifting lugs supplied on the sides of the transformer enable it to be lifted by crane.

Three-phase transformers rated 750 kVA and above are shipped on flat bed or open topped trucks due to the size and configuration of the transformer. Similar lifting lugs on the sides of the transformer enable it to be lifted by crane.

Lift the transformer utilizing all the lugs and use proper spreaders to obtain a vertical lift.

CAUTION: DO NOT LIFT THE TRANSFORMER BY USING CRANES OR JACKS ON ANY PART OF THE TRANSFORMER OTHER THAN THE LIFTING LUGS OR JACKING AREAS PROVIDED FOR THIS PURPOSE. IMPROPER LIFTING OR JACKING MAY RESULT IN SERIOUS PERSONAL INJURY AND DAMAGE TO PROPERTY.



APPROVED

NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511

REQUIREMENTS OF 03-82-224

INSPECTION

THE UNIT HAS BEEN CAREFULLY ASSEMBLED, FILLED WITH OIL, AND SEALED AT THE FACTORY.

THE OIL LEVEL CAN BE CHECKED BY MEANS OF THE LIQUID LEVEL GAUGE OR BY REMOVING THE OIL FILL PLUG WHICH IS LOCATED AT THE 25°C OIL LEVEL.

ANY UNIT WHICH DOES NOT MEET THE PROPER OIL LEVEL SHOULD BE CHECKED FOR LEAKS AND REFILLED THROUGH THE FILL PLUG BEFORE PLACING IT IN SERVICE. USE ONLY QUALITY OIL PER ASTM D3487 WHEN ADDING OIL TO THE TRANSFORMER. NOTE: EXTREME CARE SHOULD BE TAKEN TO USE OIL FREE OF ANY PCB CONTAMINATION TO AVOID FUTURE PROBLEMS WITH FEDERAL REGULATIONS.

TIGHTEN ANY PARTS THAT MAY HAVE WORKED LOOSE DURING SHIPPING. INTERNAL INSPECTION IS NOT REQUIRED FOR THIS UNIT; HOWEVER, IF THE TRANSFORMER MUST BE OPENED FOR INTERNAL INSPECTION OR FUSE REPLACEMENT, TAKE PROPER CARE TO PREVENT THE ENTRANCE OF MOISTURE OR OTHER FOREIGN MATTER INTO THE TRANSFORMER. FOR ACCESS, FIRST VENT THE TRANSFORMER, THEN REMOVE THE WEATHER COVER AND THE HANDHOLE COVER, PLACING THE NUTS AND WASHERS IN STORAGE FOR REUSE.

TO REMOVE THE WEATHER COVER, BOTH LEFT AND RIGHT HAND DOORS MUST BE OPEN. LOOSEN THE WING NUT ASSEMBLY INSIDE THE CABINET NEAR EACH TOP FRONT CORNER. LIFT THE FRONT OF THE COVER AND ROTATE 180° ABOUT THE HINGES MOUNTED AT THE REAR OF THE TANK, THEN SUPPORT THE COVER OR SLIDE IT OFF OF THE HINGES TO REMOVE IT.

FOR OFFICER IN CHARGE OF RECEIVING

JUL 1985

These instructions do not purport to cover all possible contingencies which may arise during installation, operation, or maintenance, and all details and variations of this equipment. If further information is desired by the purchaser regarding his particular installation, operation or maintenance of his equipment, the local Westinghouse Electric Corporation representative should be contacted.

When re-assembling the handhole, replace the gasket if there is evidence of damage or its thickness is less than 0.12 inches. The gasket should be compressed to a thickness of from 0.12 to 0.15 inches; however, the nuts should not be tightened greater than 20 ft-lbs.

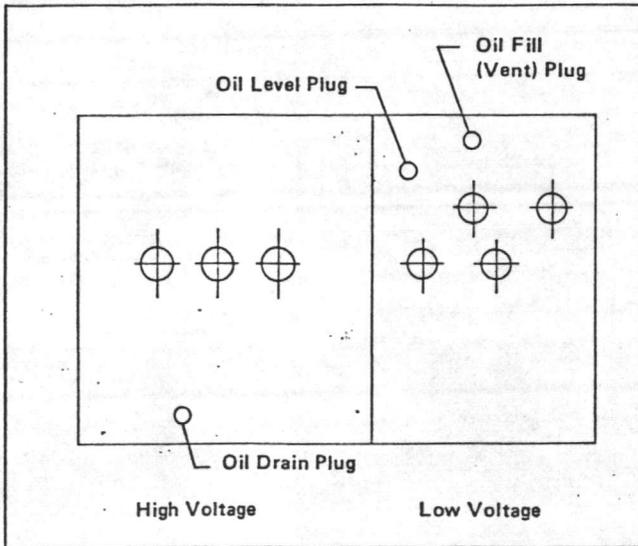


Fig. 2 Oil Plugs

STORAGE

No unusual precautions for storing need to be taken because pad-mounted transformers are built for outdoor service. However, the transformer should be stored with the tank sealed and filled with oil and the units must not be stacked on top of one another. The compartment doors should be in the closed position to protect the bushings and other accessories from damage. Care must be exercised to prevent submersion in water.

The purchaser should perform a final inspection of each transformer prior to installation.

MAINTENANCE

A periodic visual inspection of the external parts of the transformer is desirable. At such times, the general condition of the following should be noted:

1. High voltage bushings and leads
2. Low voltage bushings
3. Arresters (if provided)
4. Tamper resistance of cabinet, especially cabinet hinges and latching provisions
5. Any signs of oil leakage
6. Finish on tank
7. Ground connections
8. Accessories including warning and instruction labels.

Where parts have been broken, or where any sign of oil leakage is observed, the transformer should be removed from service until repairs can be made.

CAUTION: WHEN BROKEN PARTS, LEAKING OIL OR OTHER POTENTIALLY HAZARDOUS CONDITIONS ARE OBSERVED, REMOVE THE TRANSFORMER FROM SERVICE UNTIL REPAIRS CAN BE COMPLETED. FAILURE TO DO SO MAY RESULT IN VIOLENT FAILURE OF THE TRANSFORMER CAUSING HAZARD TO LIFE AND PROPERTY.

Where tanks show evidence of rusting or deterioration of the finish, they may be cleaned and retouched with paint available for that purpose. When bare metal is exposed, a primer should be also applied.

Periodically, the condition of the oil should be inspected and, if necessary, the oil should be removed and replaced with good, clean, dry oil per ASTM D3487.

A periodic check of the load should be made to insure that the transformer is not being unduly overloaded. Planned overloading should be in accordance with the ANSI Loading Guiding (C57.91).

Whenever replacement parts or information regarding existing transformers are required, complete nameplate data including kVA rating, style number, serial number, and a description of the part should be given to Westinghouse.

INSTALLATION

Installation should comply with the latest edition of the National Electrical Safety Code.

Mounting

The transformer should be mounted on a level pad strong enough to support the weight of the transformer. The unit should not be tilted in any direction greater than 1.5 degrees. Tilt of the transformer should be kept to a minimum, especially when it will cause deviations in oil level near drawout fuses, pressure relief devices, or other accessories specifically located with respect to the 25°C oil level.

Brackets are supplied for bolting the transformer securely to the pad.

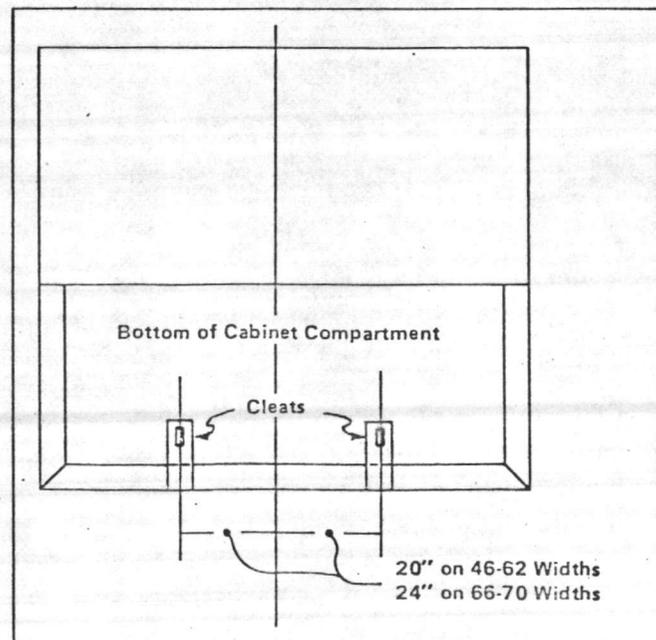
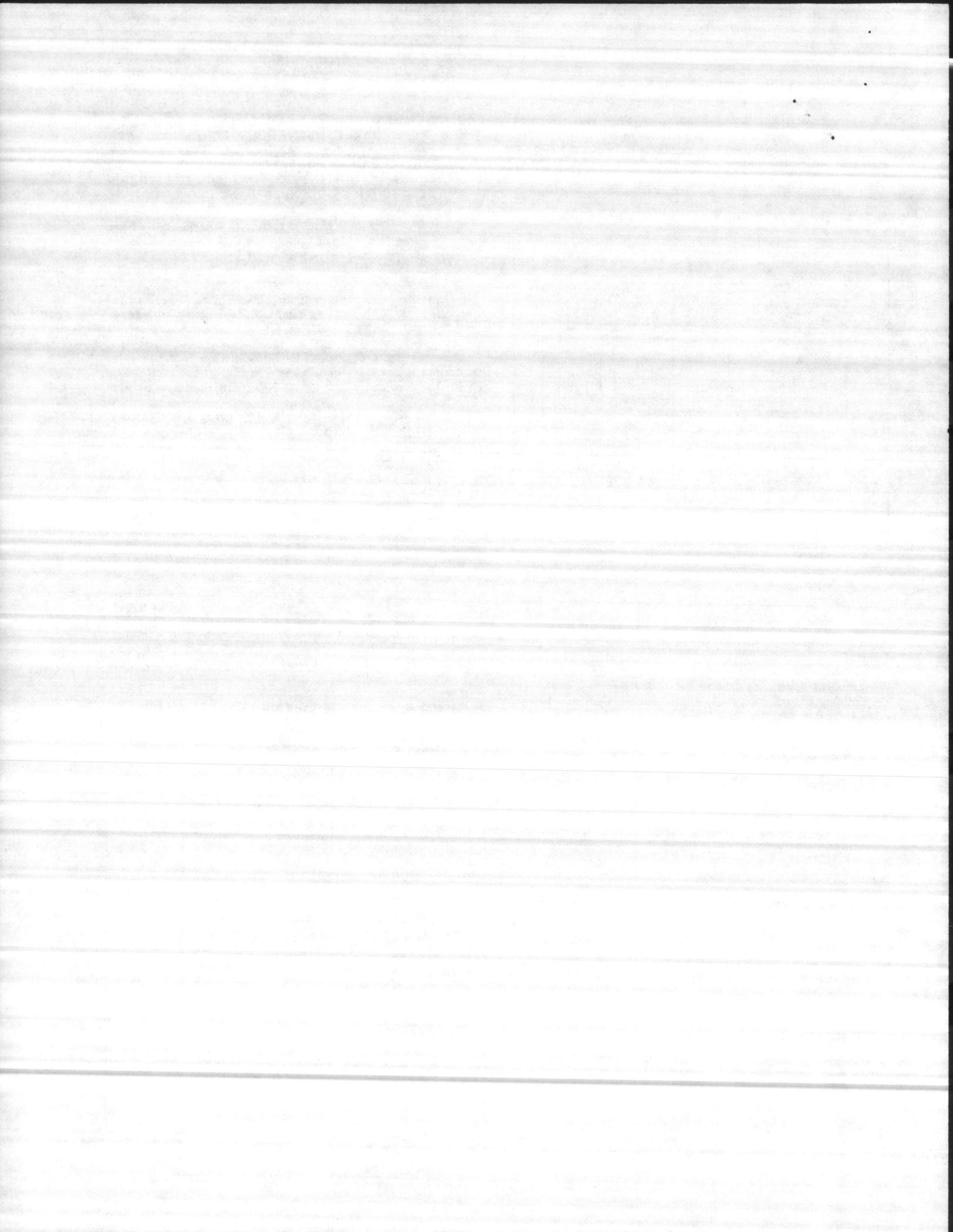


Fig. 3 Mounting Provision



The transformer cabinet should sit flush on the pad allowing no gaps which would compromise the tamper resistance of the transformer.

CAUTION: SINCE THESE TRANSFORMERS CONTAIN A FLAMMABLE INSULATING FLUID (MINERAL OIL), TRANSFORMER FAILURE CAN RESULT IN FIRE AND/OR EXPLOSION. THIS POSSIBILITY SHOULD BE CONSIDERED WHEN LOCATING THESE TRANSFORMERS IN CLOSE PROXIMITY TO BUILDINGS OR PUBLIC THOROUGHFARES.

Venting

The transformer should be vented to the atmosphere before it is placed in service if it has been pressurized for leak test or if the unit has been opened and resealed when the temperature was above or below 25°C. Venting should take place at approximately 25°C to prevent excessive operating pressures or vacuums from developing. Vent the transformer by removing the vent plug or by operating the pressure relief device normally provided.

Grounding

A good permanent low impedance ground connection must be made to the tank by means of the ground pad provided for this purpose near the bottom of the tank.

CAUTION: IMPROPER GROUNDING CAN CAUSE HIGH VOLTAGE ON METALLIC PARTS OF THE TRANSFORMER TANK AND TRANSFORMER SECONDARY TERMINALS RESULTING IN DANGER TO LIFE AND PROPERTY.

Transformers which are designed for use on a grounded wye system, that is one having a solidly grounded neutral, must have the tank and other available neutrals permanently and solidly grounded to the common neutral of the system before the transformer energized.

CAUTION: TRANSFORMERS WITH UNGROUNDED SECONDARY WINDINGS, SUCH AS WITH THE DELTA, OPEN DELTA, AND FLOATING WYE CONNECTIONS, MAY UNDER CERTAIN CONDITIONS HAVE VOLTAGES AS HIGH AS THOSE OF THE PRIMARY SUPPLY SYSTEM APPEARING FROM TERMINAL-TO-GROUND. SUCH VOLTAGES CAN RESULT IN DANGER TO LIFE AND PROPERTY.

Connections

CAUTION: ALWAYS ASSUME THAT TERMINALS ARE ENERGIZED UNLESS CHECKED AND GROUNDED. DO NOT RELY ON FUSE REMOVAL, SWITCH POSITION INDICATORS, OR OTHER VISUAL INDICATIONS. CONTACT WITH AN UNGROUNDED TERMINAL MAY RESULT IN ELECTRICAL SHOCK AND BURNS.

CAUTION: MAKE ONLY THE CONNECTIONS AND OPERATE ONLY AT THE VOLTAGES AUTHORIZED BY THE DIAGRAMS AND INFORMATION GIVEN ON THE TRANSFORMER NAMEPLATE. FAILURE TO DO SO CAN CAUSE DAMAGE TO THE TRANSFORMER AND DANGER TO NEARBY PERSONNEL.

CAUTION: THE TRANSFORMER MUST BE DE-ENERGIZED BEFORE CHANGING CONNECTIONS BY EITHER TAP CHANGER OR DUAL VOLTAGE SWITCH. FAILURE TO DO SO CAN CAUSE DANGER TO LIFE AND DAMAGE TO PROPERTY.

During installation, the recommended sequence of connections is to first make all ground connections, then the low voltage connections, and finally the high voltage connections. The trans-

former should be removed from service by reversing the above sequence of connections.

Line connections must not place such strain on the bushing terminals or insulators that would loosen the contact joints or damage the insulators.

Three-phase transformers are only designed for proper operation with all three-phases energized; operating with one or more phases open can result in unbalanced service voltages and single-phasing of the load.

Three-phase transformers may exhibit abnormal voltage and current behavior when switched one phase at a time. Three-phase switching is recommended whenever available or possible - particularly when conditions susceptible to ferroresonance exist. The highest probability of ferroresonant overvoltages occurs when ungrounded primary windings fed by underground cable circuits are switched remotely one phase at a time.

Security

Before leaving the site of an energized transformer, make sure that the cabinet is completely closed and all locking provisions are properly installed. Be certain that the terminal compartment is secured against unauthorized entry.

CAUTION: FAILURE TO SECURE THE TERMINAL COMPARTMENT COULD ALLOW ACCESS BY UNAUTHORIZED PERSONNEL RESULTING IN DANGER TO LIFE.

OPERATION

The pad-mounted transformer is an integral part of the distribution system and consideration must be given to proper protection from system disturbances. Protection from excessive voltage transients and severe overcurrents should be provided. To allow proper operation of overcurrent devices that may be supplied with the transformer, coordination with system overcurrent protection must be achieved.

HIGH VOLTAGE ACCESSORIES

CAUTION: THE TRANSFORMER AND ITS ACCESSORIES MUST BE OPERATED WITHIN THEIR RATINGS. FAILURE TO OBSERVE THESE RATINGS COULD RESULT IN SERIOUS PERSONAL INJURY AND DAMAGE TO PROPERTY.

Consult Westinghouse for the ratings of specific accessories.

Porcelain Bushings

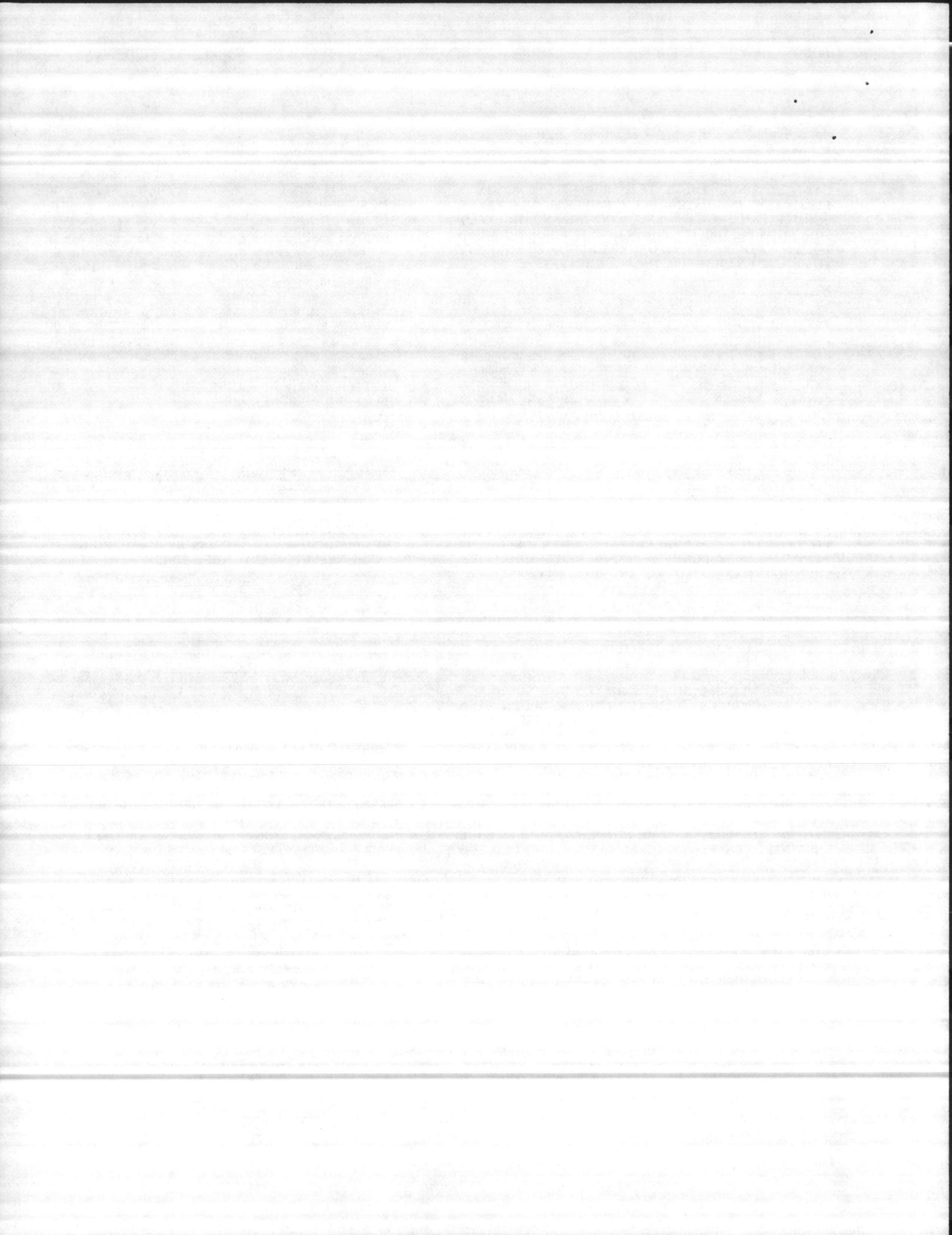
The standard high-voltage porcelain bushing is a gasketed bushing with clamp type terminals. The clamp type terminal arrangements accommodate cables ranging from No. 8 to 250 kcmil. The high voltage terminals are oriented for vertical takeoff of primary cables entering the compartment from below.

Separable Insulated Connectors

Separable insulated connector components may be universal bushings wells, integral bushings or bushing wells with inserts installed.

All separable connector components must be dry and clear of any contaminations before connecting. Unused terminals must be capped before energizing the unit.

The separable insulated connectors may be either livebreak or deadbreak. Follow the manufacturer's instructions and warnings on the use of these terminations.



Fusing

When a protective device on the primary side of the transformer has operated, the possibility of an internal transformer fault exists.

CAUTION: OPERATION OF A PRIMARY PROTECTIVE DEVICE MAY INDICATE A FAULTED TRANSFORMER. DO NOT RE-ENERGIZE IF ANY SIGN OF FAILURE IS OBSERVED. RE-ENERGIZING SHOULD BE PERFORMED FROM A REMOTE LOCATION UNLESS THE CAUSE OF DEVICE OPERATION IS POSITIVELY IDENTIFIED AND CORRECTED. TO DO OTHERWISE PRESENTS A HAZARD OF VIOLENT TRANSFORMER FAILURE RESULTING IN DANGER TO LIFE AND PROPERTY.

To assure proper operation and coordination, a fuse device should only be replaced by one with equivalent characteristics.

Protective Links

Protective links are oil-immersed high voltage expulsion fuses designed to isolate the transformer from the distribution system in the event of a transformer fault inside the tank on the load side of the link; not to provide overload or secondary fault current protection for the transformer.

Inspection or replacement of the internal link can be accomplished by using the handhole cover.

These internal fuses can be replaced utilizing the following procedures:

1. De-energize the transformer by disconnecting all power sources from the transformer (including any secondary power sources) to avoid danger to life and property. Take proper care to prevent the entrance of moisture or other foreign matter into the transformer. The transformer should be vented prior to removing the handhole cover. Remove the weather cover and then the handhole cover, placing the nuts and washers in storage for reuse.
2. Lower the oil level below the protective links.
3. The transformer should be checked for visible arcing damage and for electrical integrity such as continuity, turns ratio and insulation strength.
4. If no signs of internal failure are observed, replace with new fuse taking care to maintain electrical clearances.
5. Reassemble the weather cover and handhole. (See "Inspection" section).
6. Refill with good, clean, dry oil per ASTM D3487.

Air-Insulated Loadbreak Drawout Current-Limiting Fuse

Three-phase pad-mount transformers are supplied with an air-insulated drawout current-limiting fuses when specified. The fuse holder is a single-pole loadbreak and load make device, allowing the transformer to be de-energized by withdrawing the fuse from the transformer with a hot line tool.

High-voltage current-limiting fuses are designed to limit the flow of current (and energy) to a low impedance fault. Like protective links, their purpose is to isolate the transformer from the distribution system in the event of an internal transformer fault. Current-limiting fuses are applied when the available system fault current exceeds the interrupting capability of the protective links.

To open primary – Attach a hot line tool to the hookeye, stand to one side and rapidly pull the fuse completely from the holder.

To replace fuse – Disassemble parts from spent fuse. Assemble detail parts to new fuse per instruction decal on transformer. Replace any worn or damaged parts.

To close primary – Attach a hot line tool to the hookeye. Insert the end of the fuse into the opening until the upper contacts just enter the fuse tube. Stand to one side and rapidly push the assembly straight into the holder until the dust cap seats into the spring retainers.

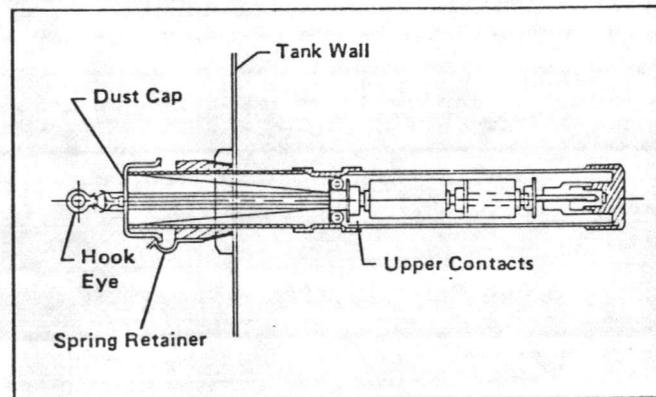


Fig. 4 Drawout Current-Limiting Fuse

Bayonet¹ Oil Fuse

Three-phase transformers are supplied with bayonet¹ oil fuses when specified. The bayonet¹ itself is a way of replacing an under oil expulsion fuse link in the field, and has single-pole loadbreak capability allowing it to be used as a switch to energize and de-energize a transformer.

It is recommended that the initial energization of transformers be accomplished through the use of loadbreak terminators, switches, cutouts, and other line sectionalizing devices.

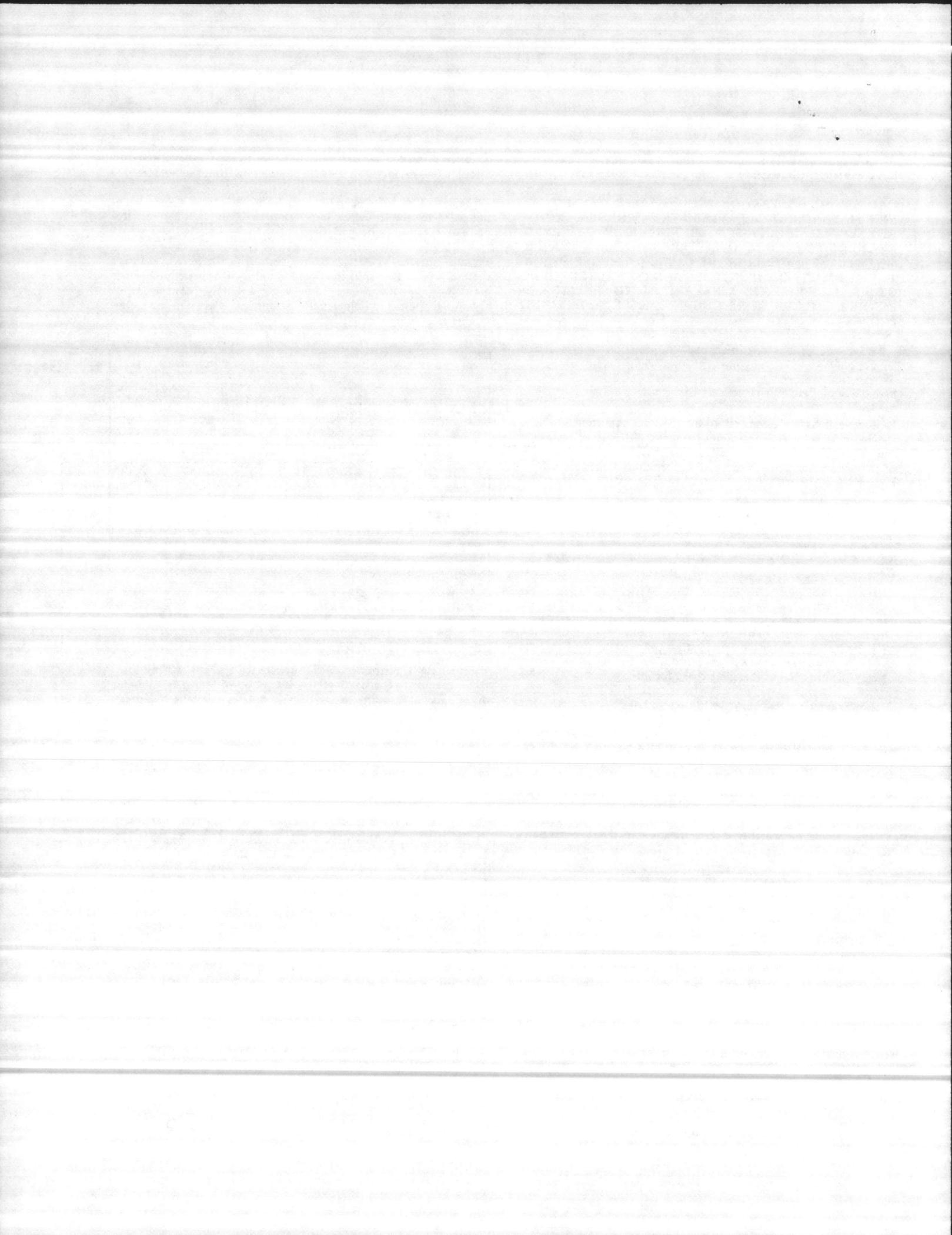
CAUTION: ANY LOADBREAK DEVICE IS SUBJECT TO VIOLENT FAILURE. WE THEREFORE RECOMMEND RE-ENERGIZING, WHENEVER POSSIBLE FROM A REMOTE LOCATION INSTEAD OF USING THE BAYONET TO CLOSE IN ON POTENTIAL FAULT CURRENT. VIOLENT FAILURE CAN CAUSE PERSONAL INJURY AND PROPERTY DAMAGE.

When replacing a blown fuse, re-energize from a remote location. This procedure is an added precaution when picking up load and after a fuse has blown. When the transformer is refused under energized conditions, it is possible the fuse would be closed in on the system's maximum fault current. This is always of concern, and any transformer showing the slightest evidence of failure could be dangerous.

To Remove Fuse

1. Lift the weather cover and hold in position with locking support bracket.
2. Relieve any pressure in the tank using the pressure relief device.

¹ Bay-O-Net is a trademark of the RTE Corporation



3. Attach universal hot line tool, or hook stick to fuse handle eye – stand to one side – unlock handle.

4. Push down and rotate the handle 90° clockwise in the tube. The 90° rotation of the fuse holder breaks any adhesion between the seal gasket and the outer tube assembly.

5. Pull the fuse holder out six inches. This opens the primary circuit. Wait a few seconds for oil to drain into the tank.

DANGER: IF ANY ARCING, RUMBLING, OR OTHER UNUSUAL NOISE IS HEARD, CURRENT IN EXCESS OF THE BAYONET'S LOADBREAK RATING IS LIKELY PRESENT. SLAM HOME THE BAYONET, LATCH AND DE-ENERGIZE FROM A REMOTE LOCATION.

6. The inner fuse holder assembly can now be removed without dripping excess oil. The total length of the inner fuse holder assembly, including fuse element cartridge, is fourteen inches.

To Replace Fuse

Instructions for replacing the fuse on the fuse holder are packed with each replacement fuse or may be obtained from the fuse manufacturer.

To Reinstall Fuse Holder

1. Attach the handle eye of the inner fuse holder assembly to the hot stick.

2. Place it into the outer assembly and slam home.

3. When the inner fuse holder assembly is inserted as far as possible, push down and rotate the locking handle, hooking it over the shoulder of the outer tube assembly. When the handle is in the locked position, make sure the cover is seated against the shoulder of the outer tube assembly.

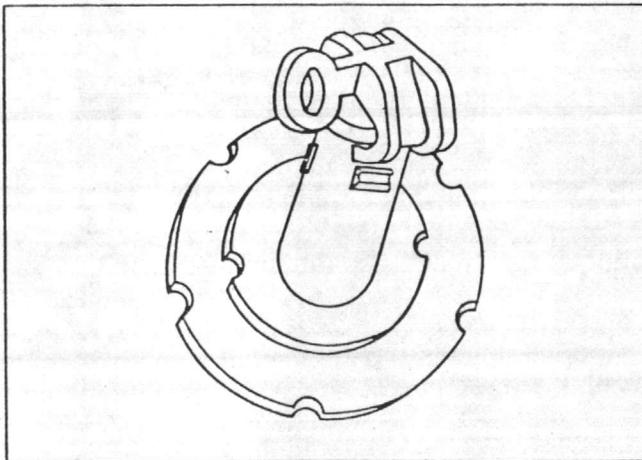


Fig. 5 Bayonet Oil Fuse

Internal Partial Range Current-Limiting Fuse

The partial range current-limiting fuse is used in series with an expulsion fuse to provide full range protection. The partial range fuse is designed to clear high current faults and the expulsion link to clear low current faults. These fuses are located under oil. Either internal expulsion fuses or bayonet¹ fuses are available as the series expulsion fuse.

¹ Bay-O-Net is a trademark of the RTE Corporation

High Voltage Switches

CAUTION: ALWAYS ASSUME THAT TERMINALS ARE ENERGIZED UNLESS CHECKED AND GROUNDED. DO NOT RELY ON FUSE REMOVAL, SWITCH POSITION INDICATORS, OR OTHER VISUAL INDICATORS. CONTACT WITH AN UNGROUNDED TERMINAL MAY RESULT IN ELECTRICAL SHOCK OR BURNS.

EFD Switch

The Westinghouse type EFD loadbreak (single-phase switching) air switch is available for either loop feed (three pole) or radial feed (single pole) application on live front transformers. A current-limiting fuse or a solid blade can be provided in the transformer connecting pole. The switch contacts are opened by drawing out the insulated switch pole so that they are completely free of the switch housing, leaving a visible disconnect. The switch poles should be drawn out or inserted quickly and uniformly with an ordinary hook stick. A schematic diagram decal is mounted on the front of the switch. The current-limiting fuse is replaced by removing the four nylon screws in the switch pole to expose the fuse.

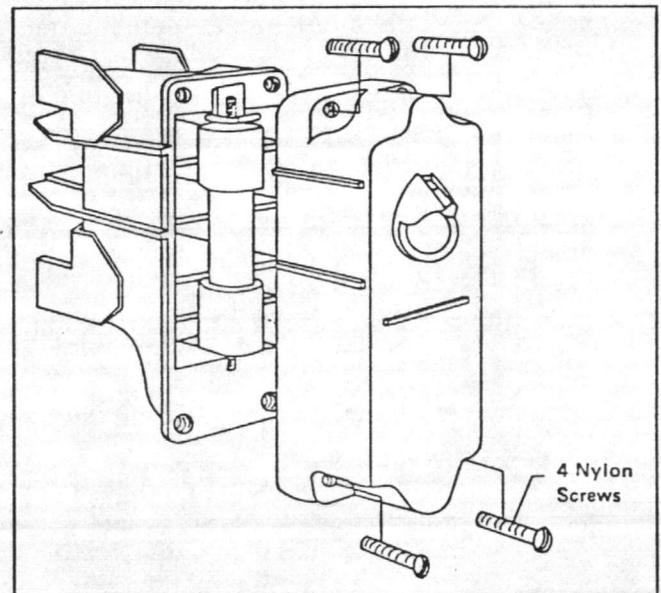


Fig. 6 EFD Switch

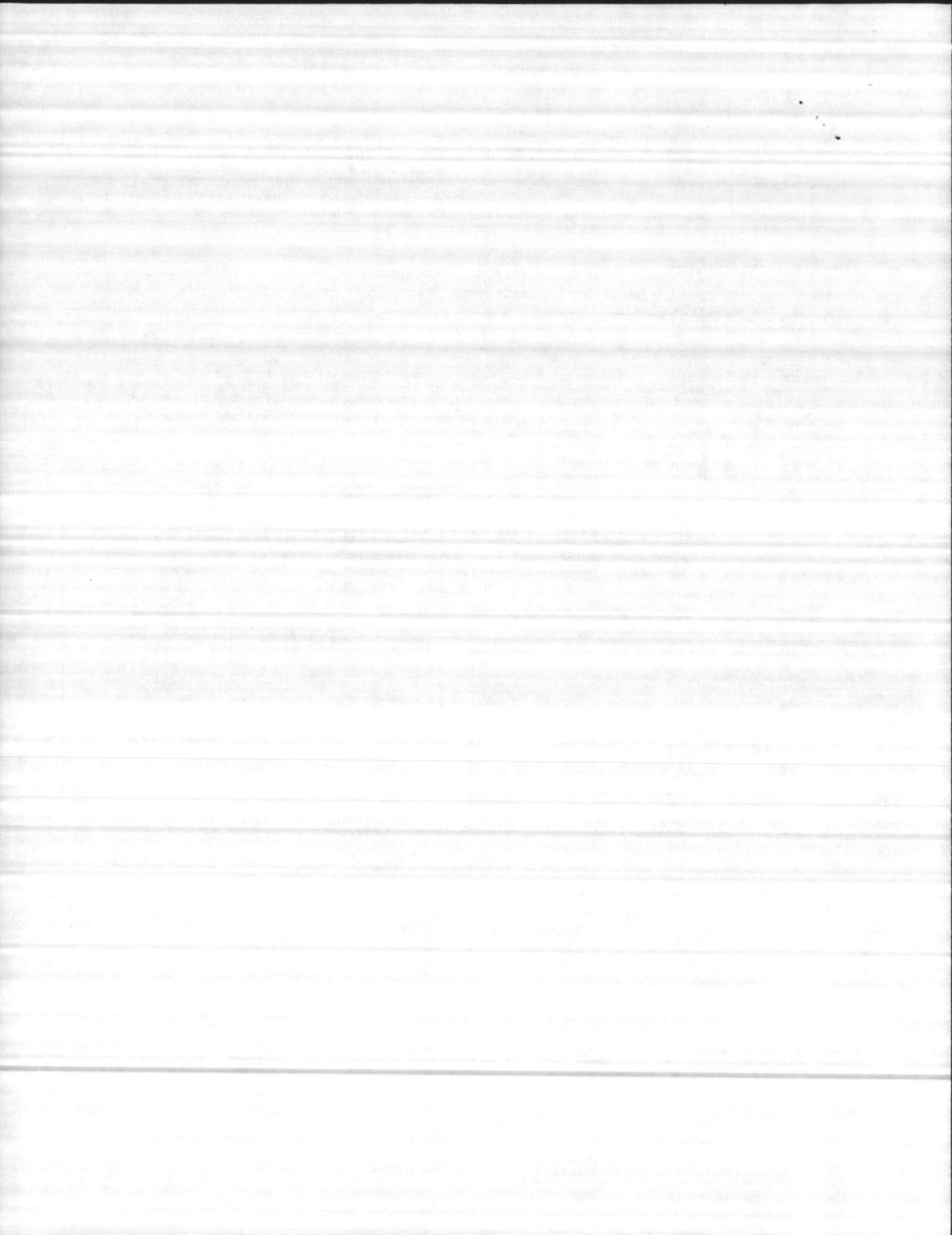
LBOR Switch

The Westinghouse type LBOR switch is an internal rotary three-pole loadbreak oil switch available for either loop feed or radial connection. For radial operation, a single two-position switch is supplied. Two two-position switches are provided for loop operation. The operating handles, which can be rotated with a hook stick or hot line tool, are located in the high voltage compartment with a position indicator showing the "closed" and "open" positions.

Circuit connections are shown on the transformer nameplate.

Tap Changers (De-energized operation only)

The tap changer provides a means of changing the voltage ratio of a transformer. It can only be operated with the transformer de-energized. The tap changer operating handle is generally located in



the upper left-hand corner of the high voltage compartment. To change taps, proceed as follows:

1. De-energize the transformer.

CAUTION: THE TAP CHANGER MUST NOT BE OPERATED WHILE THE TRANSFORMER IS ENERGIZED. TO DO SO COULD RESULT IN SERIOUS PERSONAL INJURY AND DAMAGE TO PROPERTY.

2. After de-energizing the transformer, pull the tap changer handle out until the end of the handle shaft clears the tap changer dial plate.

3. Turn the handle to the desired tap position.

4. When the shaft is over the slot in the dial plate for the desired position, apply a slight inward force and rotate the shaft within the confines of that slot until the end of the shaft moves inward beyond the face of the dial plate. This inward movement insures proper contact engagement.

Some large-size units are furnished with a power-transformer tap changer drive which requires pulling of a locking pin and a full turn of the handle for each change in tap position.

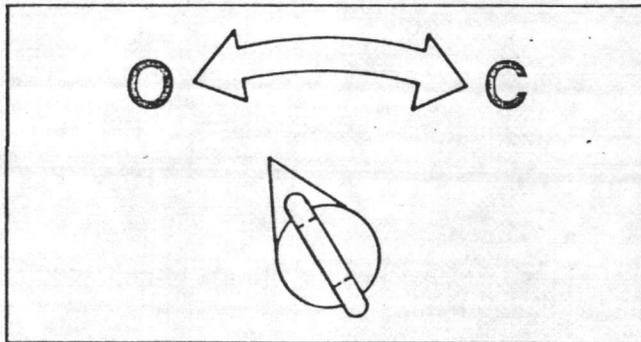


Fig. 7 LBOR Switch

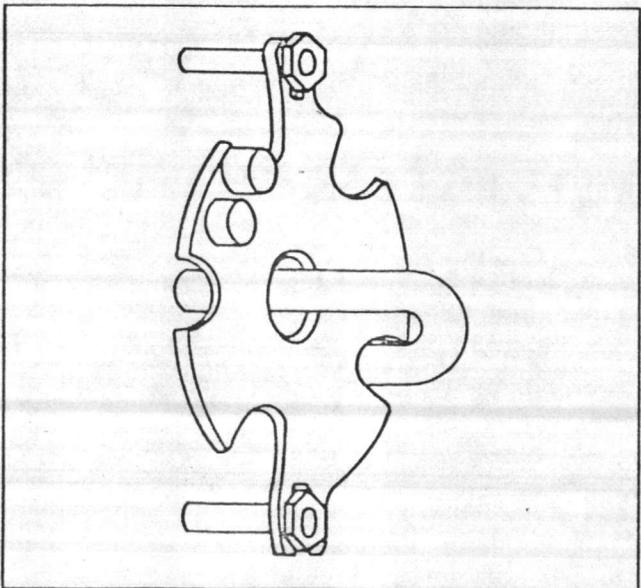


Fig. 8 Tap Changer

Dual Voltage Switch (De-energized operation only)

The dual voltage switch permits the transformer to be operated on either of two primary voltages. The dual voltage switch handle is generally located in the upper left-hand corner of the high voltage compartment. Since considerable torque is required, a wrench should be used to rotate the handle.

To change voltages, proceed as follows:

1. De-energize transformer.

CAUTION: THE DUAL VOLTAGE SWITCH MUST NOT BE OPERATED WHILE THE TRANSFORMER IS ENERGIZED. TO DO SO COULD RESULT IN SERIOUS PERSONAL INJURY AND DAMAGE TO PROPERTY.

2. Back out the locking screw.

3. Rotate the switch handle in the direction of the arrows to the new position.

4. Reinsert locking screw to discourage unauthorized movement.

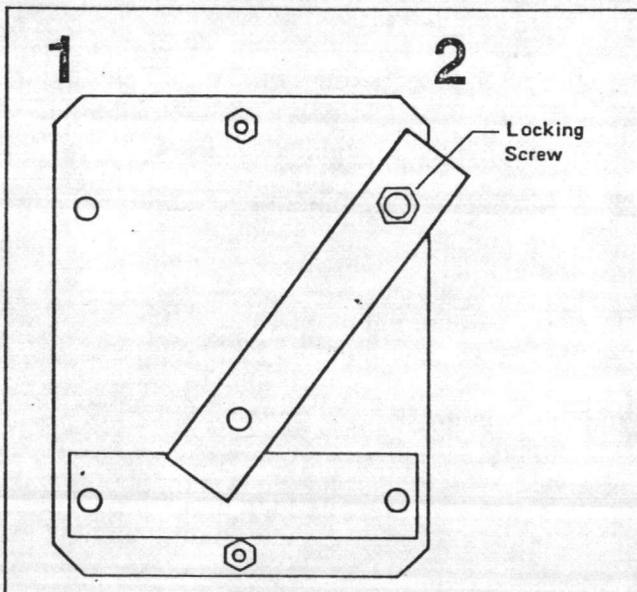


Fig. 9 Dual Voltage Switch

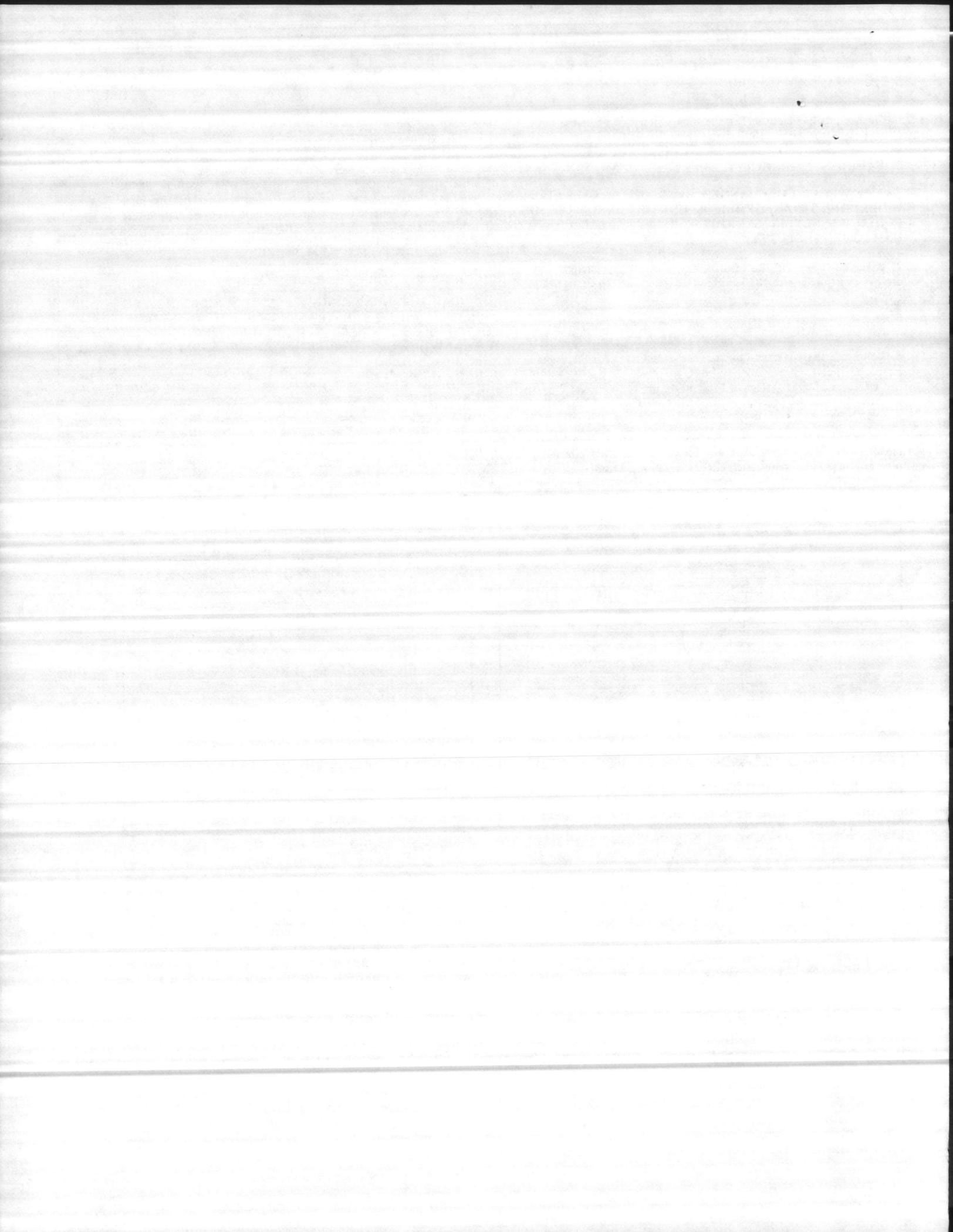
On a dual voltage transformer, position 1 is the low or multiple connected position while position 2 is the high or series connected position. On delta/wye rated transformers position 1 is the delta connected position and position 2 is the wye connected position.

CAUTION: TRANSFORMERS SUPPLIED WITH REMOVABLE FUSES MAY REQUIRE REPLACEMENT OF FUSES WITH THOSE OF THE PROPER RATING WHEN CHANGING VOLTAGE POSITIONS. USE OF AN IMPROPERLY RATED FUSE MAY CAUSE VIOLENT FUSE FAILURE RESULTING IN DANGER TO LIFE AND DAMAGE TO PROPERTY.

McGraw Edison Arc Strangler² and Switch

Transformers may be equipped with either radial or loop feed arc strangler² and switches mounted in the high voltage compartment. The fuses are current limiting fuses. The arc strangler² must be cocked before closing a switch or fuse assembly. Follow the McGraw Edison instructions for operating these devices which provide the loadbreak function using either fuses or blades.

² Arc strangler is a trademark of the McGraw Edison Company



S and C Pad-Mounted Gear

When S and C air switches or fused disconnects are used, follow the manufacturer's instructions for operating this equipment. When operated with the S and C loadbuster³ tool, these disconnects function as a loadbreak switch.

CAUTION: USE THE S AND C LOADBUSTER TOOL TO OPERATE THE SWITCH OR FUSED DISCONNECT. FAILURE TO DO SO COULD RESULT IN SERIOUS PERSONAL INJURY.

Surge Arresters

Surge arresters are to be mounted in the high voltage compartment. Their function is to intercept and divert to ground various over-voltage transients (such as lightning surges) which occur on the distribution system.

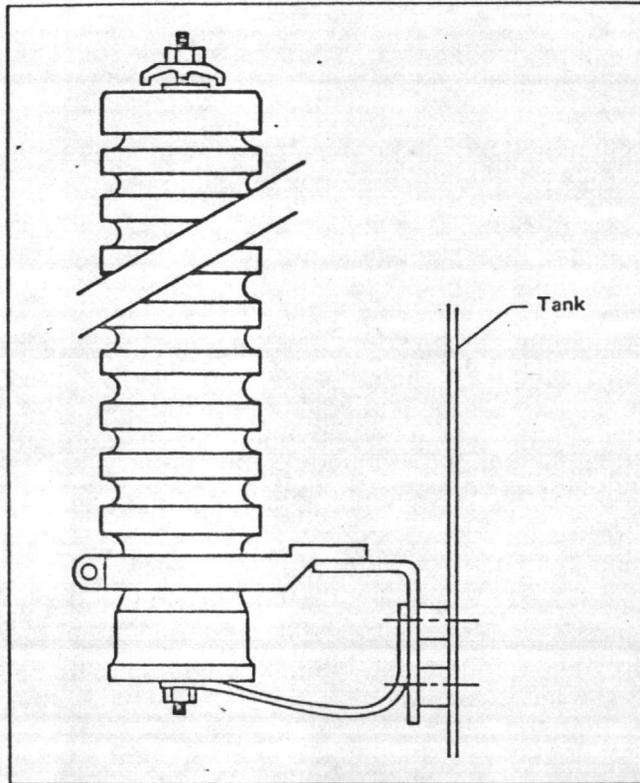


Fig. 10 Surge Arrester Mounting

LOW VOLTAGE ACCESSORIES

Low Voltage Oil-Immersed Circuit Breaker

CAUTION: WITH THE SECONDARY CIRCUIT OPEN, THERE MAY BE SUFFICIENT COUPLING TO THE SECONDARY WINDINGS THAT PERCEPTIBLE SHOCK MAY BE OBTAINED FROM THE SECONDARY TERMINALS. GROUND THE OPEN SECONDARY TERMINALS BEFORE WORKING ON THE SECONDARY SERVICE.

The three-pole secondary circuit breaker is designed to open the low voltage circuit on secondary faults or severe overloads. The breaker is located inside the tank under the oil. The handle is located in the low voltage compartment and may be operated with a hot line tool.

³Loadbuster is a trademark of the S and C Electric Company

To open the low voltage circuit breaker manually, rotate the handle so that the pointer moves from the "C" (closed) to the "O" (open).

To close the breaker, rotate the handle past the open position to reset the breaker, then back through the open position to the closed position.

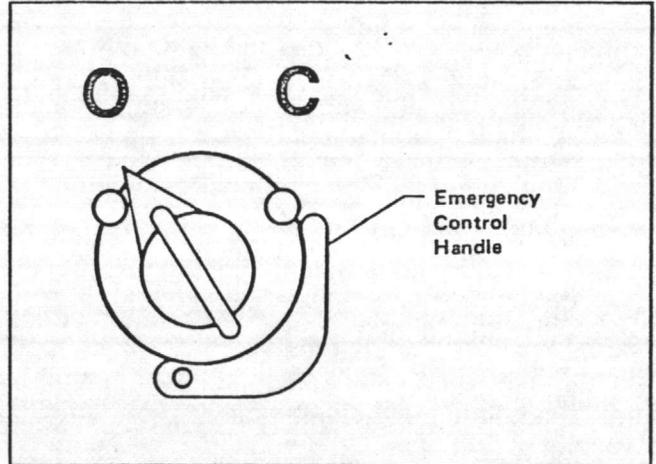


Fig. 11 Oil Breaker Operator

The breaker will reopen if a fault or excessive overload exists even though the handle may be held in the closed position.

Following a circuit breaker tripout due to an overload condition, the transformer oil may not have had time to cool sufficiently to allow the breaker latch to be reset, making it impossible to reclose the breaker immediately.

An emergency control handle is provided to recalibrate the breaker to a higher trip temperature. The emergency trip setting of the breaker should be used only when absolutely necessary and for as short a duration as possible because its use may result in a subsequent reduction in transformer life.

The breaker is recalibrated to the emergency position by removing the meter seal and rotating the emergency control handle approximately one-quarter turn down and away from the breaker operating handle. It is recommended that a new seal be applied to the handle when it is returned to the normal position after an emergency operation to avoid inadvertent operation of the emergency control.

Thermometer

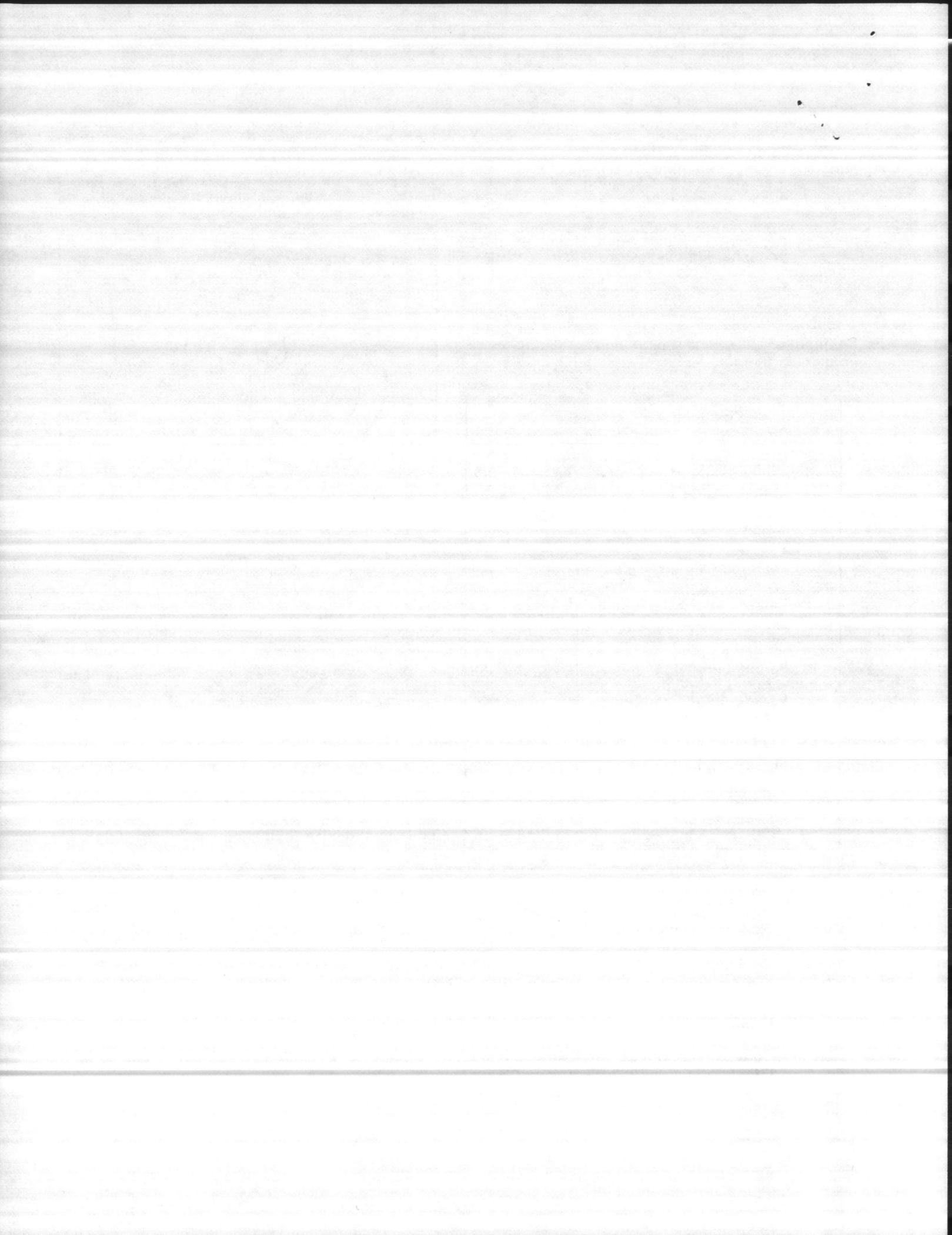
A thermometer is available to indicate the top liquid temperature in the tank. The temperature sensitive element is mounted in a leak-proof well, permitting removal of the thermometer without lowering the liquid level. The device is furnished with an additional red pointer to show the highest temperature attained since last reset.

Liquid Level Gauge

A liquid level gauge is available located in the low voltage compartment, to indicate the variation from the 25°C oil level.

Pressure-Vacuum Gauge

A pressure gauge is available located in the low voltage compartment above the bushings in the air space. The gauge indicates whether the gas space in the tank is under positive or negative pressure.



Pressure Relief Device

The automatic pressure relief device relieves excessive internal tank pressure and reseals at a lower positive pressure.

Molded Case Breakers

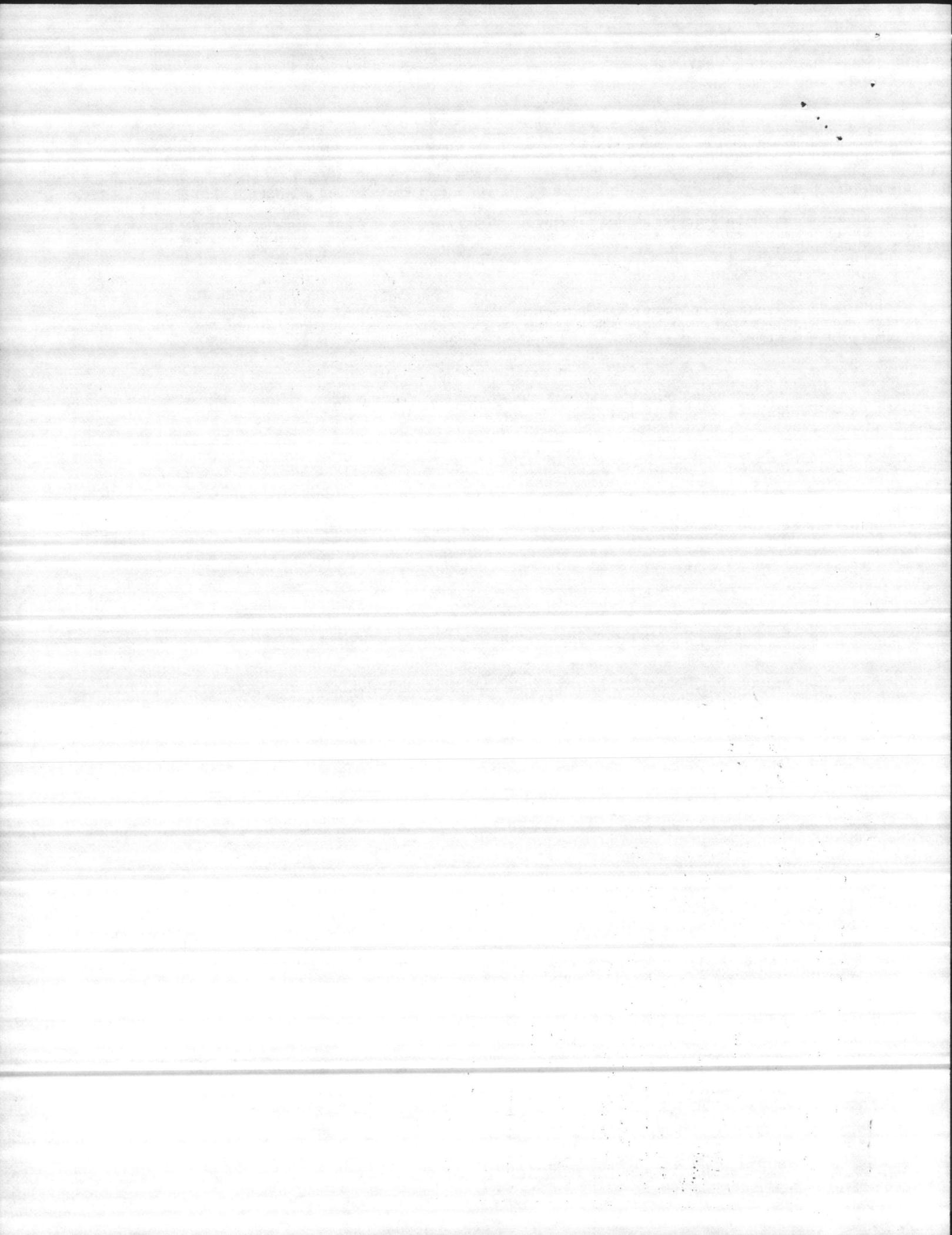
Westinghouse molded case breakers, when provided are located in the low voltage compartment. Contact the nearest Westinghouse Sales Office for data regarding this equipment.

Metering

Current transformers, potential transformers, kilowatt-hour meters or provisions for these items are mounted in or on the low voltage compartment when supplied.

APPLICATION LIMITATIONS

The transformers described herein are designed for the application conditions normally encountered on electric utility power distribution systems. As such they are suitable for use under the "usual service conditions" described in ANSI C57.12.00 (General Requirements for Liquid-Immersed Distribution, Power and Regulating Transformers). All other conditions are considered unusual service and should be avoided unless specific factory approval is obtained.



REPORT OF TRANSFORMER TESTS

PURCHASER:

GENERAL ORDER CH33095 003 STYLE NO: A65A490X2M SERIAL NO 85JA345169
DATE OF TEST 1/ 7/85 TYPE - PADMOUNT DEVIATION: APPROVED
PHASE 3 HERTZ - 60 KVA 150 ~~DISAPPROVED~~
H.V. WINDING 12470
L.V. WINDING 208Y/120

AS NOTED

JEC

11 JUL 1985

PER-CENT EXCITING CURRENT AT 100 PER-CENT RATED VOLTAGE .26
NO LOAD LOSS WATTS AT 100 PER-CENT RATED VOLTAGE 335.7
NO LOAD LOSS VALUES SHOWN AT 85 DEGREES C -- LOAD LOSS VALUES AT 85 DEGREES C
RISE OF WINDINGS BY RESISTANCE 65 DEGREE-C GUARANTEE
UNIT RATIO AND POLARITY TESTED

LANTDIV REVIEWER

DATE

----- INSULATION TESTS -----

IMPULSE TEST 95 KV FULL WAVE IMPULSE TEST APPLIED TO HV
H.V. WINDING-APPLIED POTENTIAL TEST
VOLT RATING: 12470
TEST VOLTAGE APPLIED IN KV: 34

L.V. WINDING-APPLIED POTENTIAL TEST
VOLT RATING: 208
TEST VOLTAGE APPLIED IN KV: 10

INDUCED POTENTIAL TEST:
2.0 TIMES RATED VOLTAGE ACROSS FULL WINDING
FOR 18 SECONDS AT 400 HERTZ

ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511

TEST SECS=60
~~APPROVED~~
APPROVED AS NOTED
~~TEST DISAPPROVED~~

SUBJECT TO THE REQUIREMENTS OF
CONTRACT NO. 05-82 2244

APPROVAL OF A SUBMITTAL DOES NOT INCLUDE
APPROVAL OF ANY DEVIATION FROM THE CONTRACT
REQUIREMENTS UNLESS THE CONTRACTOR
CALLS ATTENTION TO AND SUPPORTS THE
DEVIATION--THE CONTRACTOR SHALL BE
RESPONSIBLE FOR PROVIDING PROPER
PHYSICAL DIMENSIONS & WEIGHTS, COORDINA-
TION OF TRADES, ETC., AS REQUIRED.

REVIEWER JEC DATE 11 JUL 1985

FOR OFFICER IN CHARGE OF CONSTRUCTION

I HEREBY CERTIFY THAT THIS IS A TRUE REPORT BASED ON FACTORY TESTS
ACCORDANCE WITH THE LATEST TRANSFORMER TEST CODE C57.12.90-1980 OF THE
AMERICAN NATIONAL STANDARDS INSTITUTE, AND THAT THE TRANSFORMER WITH-
STOOD THE ABOVE TRANSFORMER TESTS.

ENGINEERING APPROVAL

DATE JAN 8 1985

John D. Best

1947
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RECEIVED
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REPORT OF TRANSFORMER TESTS

PURCHASER:

GENERAL ORDER CH33095 005 STYLE NO: A65E560XP9 SERIAL NO 85JA346043

DATE OF TEST 1/ 8/85 TYPE - PADMOUNT

PHASE 3 HERTZ - 60 KVA 500

H.V. WINDING 12470

L.V. WINDING 480Y/277

PER-CENT EXCITING CURRENT AT 100 PER-CENT RATED VOLTAGE .72

NO LOAD LOSS WATTS AT 100 PER-CENT RATED VOLTAGE 1147.0
NO LOAD LOSS VALUES SHOWN AT 85 DEGREES C -- LOAD LOSS VALUES AT 85 DEGREES C
RISE OF WINDINGS BY RESISTANCE 65 DEGREE-C GUARANTEE

UNIT RATIO AND POLARITY TESTED

----- INSULATION TESTS -----

IMPULSE TEST 95 KV FULL WAVE IMPULSE TEST APPLIED TO HV
H.V. WINDING-APPLIED POTENTIAL TEST
VOLT RATING: 12470
TEST VOLTAGE APPLIED IN KV: 34

L.V. WINDING-APPLIED POTENTIAL TEST
VOLT RATING: 480
TEST VOLTAGE APPLIED IN KV: 10

INDUCED POTENTIAL TEST: 2.0 TIMES RATED VOLTAGE ACROSS FULL WAVE
FOR 18 SECONDS AT 400 HERTZ

I HEREBY CERTIFY THAT THIS IS A TRUE REPORT BASED ON FACTORY TESTS MADE IN ACCORDANCE WITH THE LATEST TRANSFORMER TEST CODE C57.12.90-1980 OF THE AMERICAN NATIONAL STANDARDS INSTITUTE, AND THAT THE TRANSFORMER STOOD THE ABOVE TRANSFORMER TESTS.

ENGINEERING APPROVAL

DATE JAN 9 1985

DEVIATION: APPROVED

~~DISAPPROVED~~

LANTDIV REVIEWER

DATE

AS NOTED

DEC

11 JUL 1985

TEST SECS=60

ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511

APPROVED
~~DISAPPROVED~~

SUBJECT TO THE REQUIREMENTS OF
TESTS MADE IN 05-82 2244

APPROVAL OF A SUBMITTAL DOES NOT INCLUDE
APPROVAL OF ANY DEVIATION FROM THE CON-
TRACT REQUIREMENTS UNLESS THE CONTRAC-
TOR CALLS ATTENTION TO AND SUPPORTS THE
DEVIATION--THE CONTRACTOR SHALL BE
RESPONSIBLE FOR PROVIDING PROPER
PHYSICAL DIMENSIONS & WEIGHTS, COORDINA-
TION OF TRADES, ETC AS REQUIRED.

REVIEWER DEC DATE 11 JUL 1985

FOR OFFICER IN CHARGE OF CONSTRUCTION

REPORT OF TRANSFORMER TESTS

PURCHASER:

GENERAL ORDER CH33095 001

STYLE NO: A65A760X2K

SERIAL NO 85JA350029

DATE OF TEST 1/15/85

TYPE - PADMOUNT

DEVIATION APPROVED

AS NOTED

PHASE 3

HERTZ - 60

KVA 75

~~DISAPPROVED~~

H.V. WINDING 12470

L.V. WINDING 208Y/120

LANTDIV REVIEWER

LEC

PER-CENT EXCITING CURRENT AT 100 PER-CENT RATED VOLTAGE .66

DATE

11 JUL 1985

NO LOAD LOSS WATTS AT 100 PER-CENT RATED VOLTAGE 304.4
NO LOAD LOSS VALUES SHOWN AT 85 DEGREES C -- LOAD LOSS VALUES AT 85 DEGREES C
RISE OF WINDINGS BY RESISTANCE 65 DEGREE-C GUARANTEE

UNIT RATIO AND POLARITY TESTED

----- INSULATION TESTS -----

IMPULSE TEST 95 KV FULL WAVE IMPULSE TEST APPLIED TO HV
H.V. WINDING-APPLIED POTENTIAL TEST
VOLT RATING: 12470
TEST VOLTAGE APPLIED IN KV: 34

TEST SECS=60

L.V. WINDING-APPLIED POTENTIAL TEST
VOLT RATING: 208
TEST VOLTAGE APPLIED IN KV: 10

TEST SECS=30

INDUCED POTENTIAL TEST:
2.0 TIMES RATED VOLTAGE ACROSS FULL WINDING APPLIED
FOR 18 SECONDS AT 400 HERTZ

ATLANTIC DIVISION	
NAVAL FACILITIES ENGINEERING COMMAND	
NORFOLK, VIRGINIA 23511	
APPROVED	
APPROVED AS NOTED	
DISAPPROVED	
SUBJECT TO THE REQUIREMENTS OF	
CONTRACT NO.	05-82 2244
APPROVAL OF A SUBMITTAL DOES NOT INCLUDE APPROVAL OF ANY DEVIATION FROM THE CONTRACT REQUIREMENTS UNLESS THE CONTRACTOR CALLS ATTENTION TO AND SUPPORTS THE DEVIATION--THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROPER PHYSICAL DIMENSIONS & WEIGHTS, COORDINATION OF TRADES, ETC., AS REQUIRED.	
REVIEWER	<i>LEC</i>
DATE	11 JUL 1985
FOR OFFICER IN CHARGE OF CONSTRUCTION	

I HEREBY CERTIFY THAT THIS IS A TRUE REPORT BASED ON FACTORY TESTS MADE IN ACCORDANCE WITH THE LATEST TRANSFORMER TEST CODE C57.12.90-1980 OF THE AMERICAN NATIONAL STANDARDS INSTITUTE, AND THAT THE TRANSFORMER WITHSTOOD THE ABOVE TRANSFORMER TESTS.

ENGINEERING APPROVAL

DATE JAN 16 1985

John D. Burt

FOR OFFICIAL USE ONLY OF COMPTON

REVIEWED BY DATE

JUL 1962

FOR THE PURPOSES OF THE...
...COORDINATING...
...RESEARCH...
...DEVELOPMENT...
...TESTING...
...OPERATION...
...MAINTENANCE...
...REPAIR...
...REPLACEMENT...
...DISPOSAL...

00-00

APPROVED BY DATE

REVIEWED BY DATE

DATE

FOR OFFICIAL USE ONLY OF COMPTON

REVIEWED BY DATE

DATE

JUL 1962

REVIEWED BY

DATE

JUL 1962

REPORT OF TRANSFORMER TESTS

PURCHASER:

GENERAL ORDER CH33095 004 STYLE NO: A65E120X2N SERIAL NO 85JA346163

DATE OF TEST 1/14/85 TYPE - PADMOUNT

PHASE 3 HERTZ - 60

H.V. WINDING 12470

L.V. WINDING 480Y/277

PER-CENT EXCITING CURRENT AT 100 PER-CENT RATED VOLTAGE 1.10

NO LOAD LOSS WATTS AT 100 PER-CENT RATED VOLTAGE 479.3

NO LOAD LOSS VALUES SHOWN AT 85 DEGREES C -- LOAD LOSS VALUES AT 85 DEGREES C

RISE OF WINDINGS BY RESISTANCE 65 DEGREE-C GUARANTEE

UNIT RATIO AND POLARITY TESTED

KVA 112.5
~~DEVIATION: APPROVED~~

AS NOTED

~~DISAPPROVED~~

LANTDIV REVIEWER

LEC
11 JUL 1985

DATE

----- INSULATION TESTS -----

IMPULSE TEST 95 KV FULL WAVE IMPULSE TEST APPLIED TO HV

H.V. WINDING-APPLIED POTENTIAL TEST
VOLT RATING: 12470
TEST VOLTAGE APPLIED IN KV: 34

L.V. WINDING-APPLIED POTENTIAL TEST
VOLT RATING: 480
TEST VOLTAGE APPLIED IN KV: 10

INDUCED POTENTIAL TEST: 2.0 TIMES RATED VOLTAGE ACROSS FULL WINDING APPLIED
FOR 18 SECONDS AT 400 HERTZ

TEST SECS=60

ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
TEST STATION
NORFOLK, VIRGINIA 23511

~~APPROVED~~
~~APPROVED AS NOTED~~

~~DISAPPROVED~~

I HEREBY CERTIFY THAT THIS IS A TRUE REPORT BASED ON FACTORY TESTS TO THE REQUIREMENTS OF
ACCORDANCE WITH THE LATEST TRANSFORMER TEST CODE C57.12.90-1980 OF THE
AMERICAN NATIONAL STANDARDS INSTITUTE, AND THAT THE TRANSFORMER
STOOD THE ABOVE TRANSFORMER TESTS.

05-82 2244

ENGINEERING APPROVAL

DATE JAN 15 1985

John D. Best

APPROVAL OF A SUBMITTAL DOES NOT INCLUDE
APPROVAL OF ANY DEVIATION FROM THE CON-
TRACT REQUIREMENTS UNLESS THE CONTRAC-
TOR CALLS ATTENTION TO AND SUPPORTS THE
DEVIATION--THE CONTRACTOR SHALL BE
RESPONSIBLE FOR PROVIDING PROPER
PHYSICAL DIMENSIONS & WEIGHTS, COORDINA-
TION OF TRADES, ETC., AS REQUIRED.

REVIEWER *LEC* DATE 11 JUL 1985

FOR OFFICER IN CHARGE OF CONSTRUCTION

100 CHURCH ST. NEW YORK

RECEIVED

DATE

JUN 10 1932

100 CHURCH ST. NEW YORK
RECEIVED
DEPARTMENT OF THE CITY OF NEW YORK
100 CHURCH ST. NEW YORK
RECEIVED
DEPARTMENT OF THE CITY OF NEW YORK
100 CHURCH ST. NEW YORK
RECEIVED
DEPARTMENT OF THE CITY OF NEW YORK
100 CHURCH ST. NEW YORK
RECEIVED
DEPARTMENT OF THE CITY OF NEW YORK

03-85

200101 TO THE
DISTRICT

VIA REGISTERED MAIL

ROBERT A. MURPHY

100 CHURCH ST. NEW YORK

DATE

JUN 10 1932

RECEIVED

DEPARTMENT OF THE CITY OF NEW YORK

JUN 10 1932

REPORT OF TRANSFORMER TESTS

PURCHASER:

GENERAL ORDER CH33095 002 STYLE NO: A55A530XPB SERIAL NO 85JA342164

DATE OF TEST 1/ 3/85 TYPE - PADMOUNT

PHASE 3 HERTZ - 60 KVA 300

H.V. WINDING 12470

L.V. WINDING 208Y/120

PER-CENT EXCITING CURRENT AT 100 PER-CENT RATED VOLTAGE .67

NO LOAD LOSS WATTS AT 100 PER-CENT RATED VOLTAGE 809.4
NO LOAD LOSS VALUES SHOWN AT 85 DEGREES C -- LOAD LOSS VALUES AT 85 DEGREES C
RISE OF WINDINGS BY RESISTANCE 65 DEGREE-C GUARANTEE

UNIT RATIO AND POLARITY TESTED

----- INSULATION TESTS -----

IMPULSE TEST 95 KV FULL WAVE IMPULSE TEST APPLIED TO HV
H.V. WINDING-APPLIED POTENTIAL TEST
VOLT RATING: 12470
TEST VOLTAGE APPLIED IN KV: 34

L.V. WINDING-APPLIED POTENTIAL TEST
VOLT RATING: 208
TEST VOLTAGE APPLIED IN KV: 10

INDUCED POTENTIAL TEST:
2.0 TIMES RATED VOLTAGE ACROSS FULL WINDING
FOR 18 SECONDS AT 400 HERTZ

I HEREBY CERTIFY THAT THIS IS A TRUE REPORT BASED ON FACTORY TESTS MADE IN ACCORDANCE WITH THE LATEST TRANSFORMER TEST CODE C57.12.90-1980 OF THE AMERICAN NATIONAL STANDARDS INSTITUTE, AND THAT THE TRANSFORMER WITHSTOOD THE ABOVE TRANSFORMER TESTS.

ENGINEERING APPROVAL

DATE JAN 4 1985

ATLANTIC DIVISION
EST. SEC. 610
NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511

EST. SEC. 610
~~APPROVED=60~~
APPROVED AS NOTED
~~DISAPPROVED~~

SUBJECT TO THE REQUIREMENTS OF
CONTRACT NO. 05-82 2244

APPROVAL OF A SUBMITTAL DOES NOT INCLUDE APPROVAL OF ANY DEVIATION FROM THE CONTRACT REQUIREMENTS UNLESS THE CONTRACTOR CALLS ATTENTION TO AND SUPPORTS THE DEVIATION--THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROPER PHYSICAL DIMENSIONS & WEIGHTS, COORDINATION OF TRADES, ETC., AS REQUIRED.

REVIEWER *JEC* DATE 11 JUL 1985

FOR OFFICER IN CHARGE OF CONSTRUCTION

AS NOTED

~~DISAPPROVED~~

LANT DIV REVIEWER

DATE

JEC
11 JUL 1985

REPORT OF TRANSFORMER TESTS

PURCHASER:

GENERAL ORDER CH33095 002

STYLE NO: A65A530XPB

SERIAL NO 85JA342206

DATE OF TEST 1/11/85

TYPE - PADMOUNT

PHASE 3

HERTZ - 60

KVA 300

H.V. WINDING 12470

L.V. WINDING 208Y/120

PER-CENT EXCITING CURRENT AT 100 PER-CENT RATED VOLTAGE .67

NO LOAD LOSS WATTS AT 100 PER-CENT RATED VOLTAGE 798.5
NO LOAD LOSS VALUES SHOWN AT 85 DEGREES C --- LOAD LOSS VALUES AT 85 DEGREES C
RISE OF WINDINGS BY RESISTANCE 65 DEGREE-C GUARANTEE

UNIT RATIO AND POLARITY TESTED

----- INSULATION TESTS -----

IMPULSE TEST 95 KV FULL WAVE IMPULSE TEST APPLIED TO HV
H.V. WINDING-APPLIED POTENTIAL TEST
VOLT RATING: 12470
TEST VOLTAGE APPLIED IN KV: 34

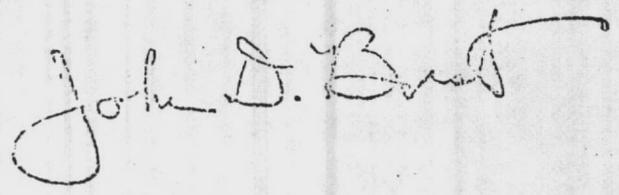
L.V. WINDING-APPLIED POTENTIAL TEST
VOLT RATING: 208
TEST VOLTAGE APPLIED IN KV: 10

INDUCED POTENTIAL TEST: 2.0 TIMES RATED VOLTAGE ACROSS FULL WINDING
FOR 18 SECONDS AT 400 HERTZ

I HEREBY CERTIFY THAT THIS IS A TRUE REPORT BASED ON FACTORY TESTS IN ACCORDANCE WITH THE LATEST TRANSFORMER TEST CODE C57.12.90-1980 OF THE AMERICAN NATIONAL STANDARDS INSTITUTE, AND THAT THE TRANSFORMER WITHSTOOD THE ABOVE TRANSFORMER TESTS.

ENGINEERING APPROVAL

DATE JAN 14 1985



APPROVED
DISAPPROVED

AS NOTED

LANTDIV REVIEWER

DATE

11 JUL 1985

TEST SECS=60

TEST SECS=60

ATLANTIC DIVISION NAVAL FACILITIES ENGINEERING COMMAND NORFOLK, VIRGINIA 23511	
APPROVED _____ APPROVED AS NOTED _____ DISAPPROVED _____	SUBJECT TO THE REQUIREMENTS OF CONTRACT NO. 05-82 2244
APPROVAL OF A SUBMITTAL DOES NOT INCLUDE APPROVAL OF ANY DEVIATION FROM THE CONTRACT REQUIREMENTS UNLESS THE CONTRACTOR CALLS ATTENTION TO, AND SUPPORTS THE DEVIATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROPER PHYSICAL DIMENSIONS & WEIGHTS, COORDINATION OF TRADES, ETC., AS REQUIRED.	
REVIEWER _____	DATE <u>11 JUL 1985</u>
FOR OFFICER IN CHARGE OF CONSTRUCTION	

RECEIVED

1985 JUL 17

THE DIRECTOR OF THE FBI
WASHINGTON, D.C. 20535
FROM: SAC, NEW YORK (100-100000)
SUBJECT: [Illegible]

100-100000-5575

RE: [Illegible]
[Illegible]
[Illegible]

FOR THE DIRECTOR
BY: [Illegible]

DATE

1985 JUL 17

BY: [Illegible]

RECEIVED

100-100000

100-100000-5575

Westinghouse Electric Corporation

SEND APPROVALS OR INQUIRIES TO:

P. O. Box 32817
Charlotte, N. C. 28232

TRANSMITTAL DATE

S. O. NO.	PROD. CODE	ATTN. ORDER SERVICE REP. B. T. PENDER	CUST. ORDER NO. 84E651	G. O. NO. & DATE-C/N DATE CH-33095-RJ
CUSTOMER Maddux Supply Co Greenville, N. C.			ULTIMATE USER AND/OR MARKINGS Southerland Elec Co c/o U. E. P. H. Camp LeJeune, N. C.	

<input checked="" type="checkbox"/> FOR APPROVAL, TO MAINTAIN SHIPPING SCHEDULE, APPROVED DWGS, MUST BE RECEIVED BY WESTINGHOUSE ON <u>9/18/84</u>	<input type="checkbox"/> FOR CONSTRUCTION OR INSTALLATION
DRAWINGS ARE IN COMPLIANCE WITH YOUR SPECIFIED REQUIREMENTS, DRAWINGS "APPROVED" OR "APPROVED WITH MODIFICATIONS" AUTHORIZE WESTINGHOUSE TO PROCEED WITH THE MANUFACTURE, MODIFICATIONS NOT IN THE CONTRACT OR MODIFICATIONS MADE DURING OR AFTER DRAWING APPROVAL MAY RESULT IN A PRICE CHANGE AND/OR SHIPMENT DELAY.	THE EQUIPMENT SHOWN ON THESE DRAWINGS(S) HAS BEEN RELEASED FOR MANUFACTURE, ANY MODIFICATION MAY RESULT IN PRICE CHANGE OR SHIPMENT DELAY.

DRAWINGS				INSTR. BOOKS		RPD		TEST REPORTS	SPECIFIC CUSTOMER INSTRUCTIONS ARE DETAILED IN NOTES *TYPE OF REPRO
APPROVAL	CONSTRUCTION OR INSTALL.								
STD./SKETCH	PAPER REPRO	PAPER	*REPRO	BND.	UN-BND.	STD.	REC. PRICED		MAIL DWGS. TO
12		12						6	Maddux Supply Co Box 4067 Greenville, N. C. 27834 Lancaster
1		1						1	RALEIGH OFFICE - L. Vaughan
1		1						1	CHARLOTTE OFFICE - B. T. Pender

THIS LINE FOR DIVISION USE ONLY

T/S									
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

ITEM	QUANTITY	DESCRIPTION
1	1	75 KVA Transformer, Style A65A760X2K
2	2	300 KVA Transformer, Style A65A530X2L
3	1	150 KVA Transformer, Style A65A490X2M
4	1	112.5 KVA Transformer, Style A65E120X2N

DWG. NO.	SUB	DRAWING TITLE
Item 1	7146C25	Outline 266P347H43 Nameplate
Item 2	7146C26	Outline 266P347H43 Nameplate
Item 3	7146C27	Outline 266P347H43 Nameplate
Item 4	7146C28	Outline 266P347H43 Nameplate
Item 5	7146C29	Outline 266P347H43 Nameplate

ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NOFOLK, VIRGINIA 23511

500 KVA Transformer, Style A65E560X2P

APPROVED AS NOTED

SUBJECT TO THE REQUIREMENTS OF CONTRACT NO. **05-82 2244**

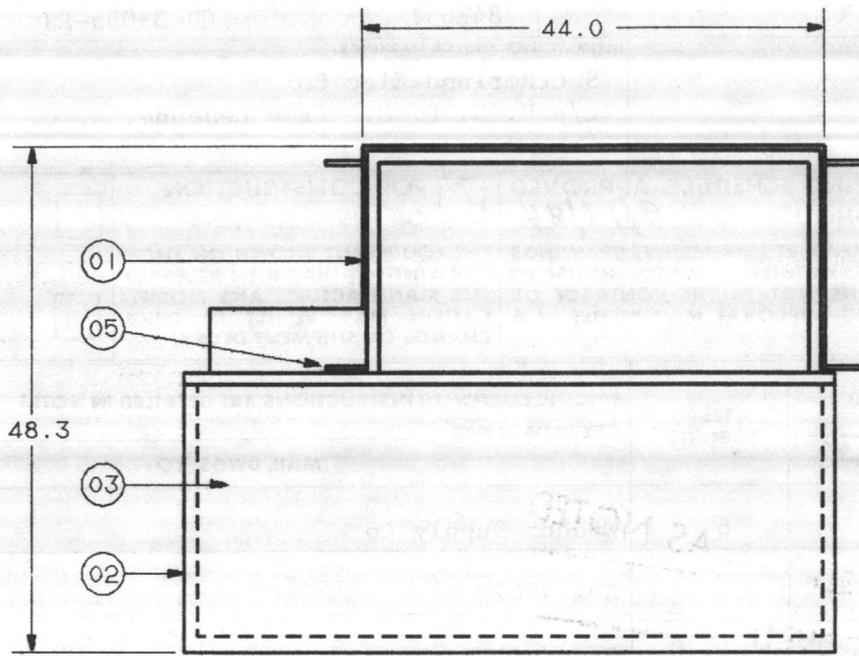
APPROVAL OF A SUBMITTAL DOES NOT INCLUDE APPROVAL OF ANY DEVIATION FROM THE CONTRACT REQUIREMENTS UNLESS THE CONTRACTOR CALLS ATTENTION TO AND SUPPORTS THE DEVIATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROPER PHYSICAL DIMENSIONS & WEIGHTS, COORDINATION OF TRADES, ETC., AS REQUIRED.

REVIEWER: *JEC* DATE: **11 JUL 1985**

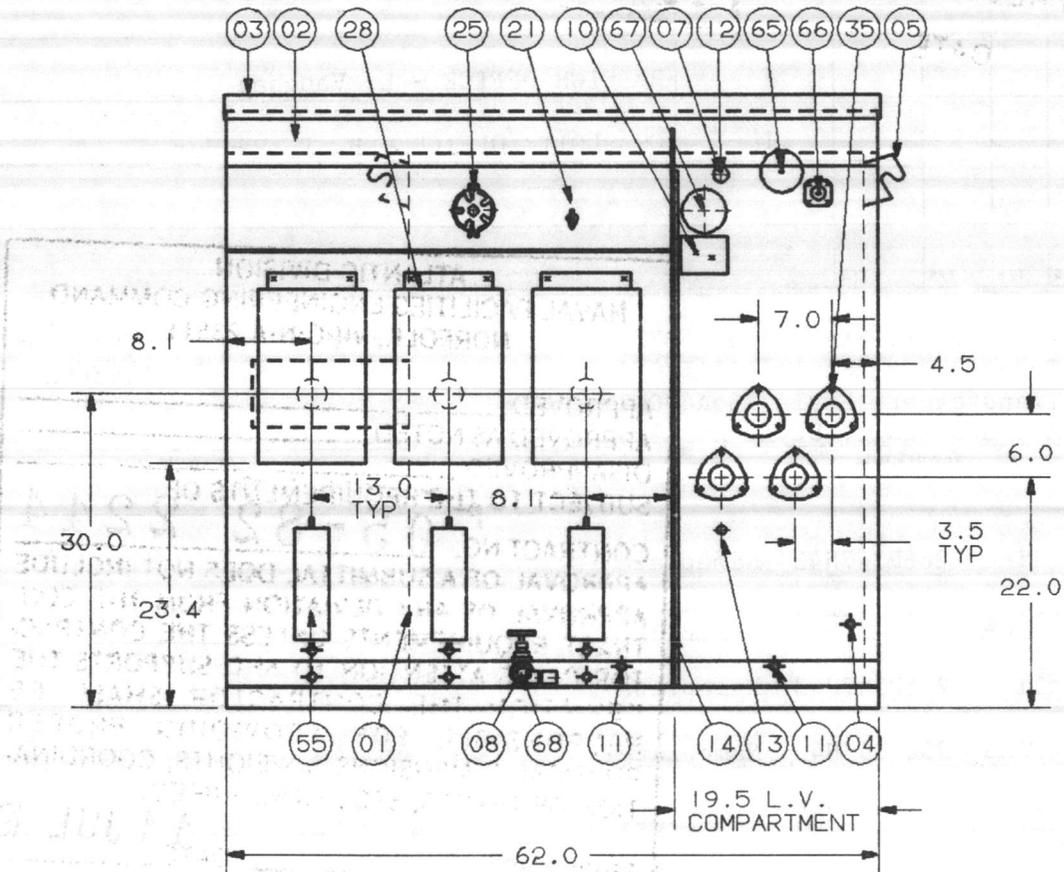
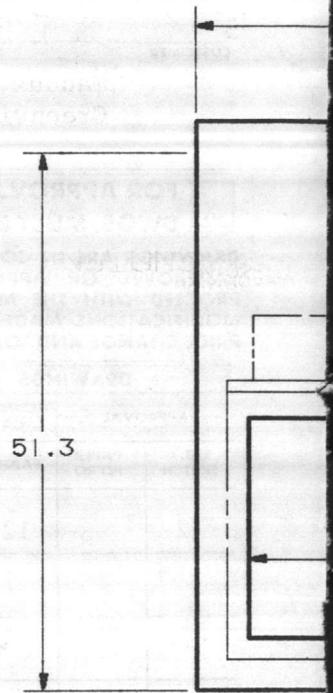
FOR OFFICER IN CHARGE OF CONSTRUCTION

* THIS TRANSMITTAL IS COMPLETE PARTIAL With Drawings Noted Above Or On Attached Sheet to be sent by *Rosemary Augustin*

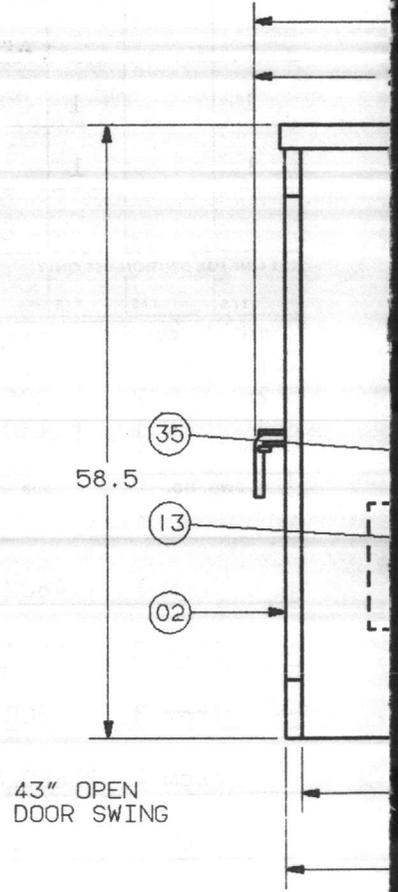
"This drawing contains information proprietary to Westinghouse Electric Corporation; it is submitted in confidence and is to be used solely for the purpose for which it is furnished and returned upon request. This drawing and such information is not to be reproduced, transmitted, disclosed or used otherwise in whole or in part without the written authorization of Westinghouse Electric Corporation."



TOP VIEW

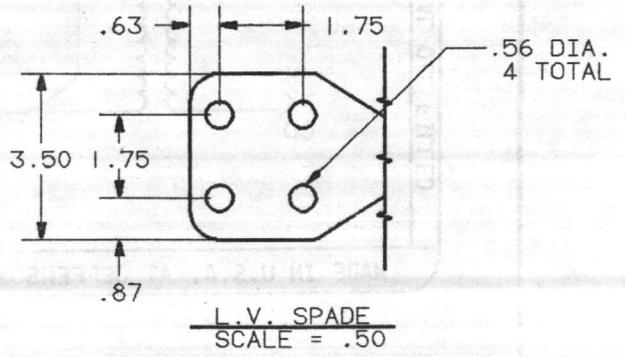
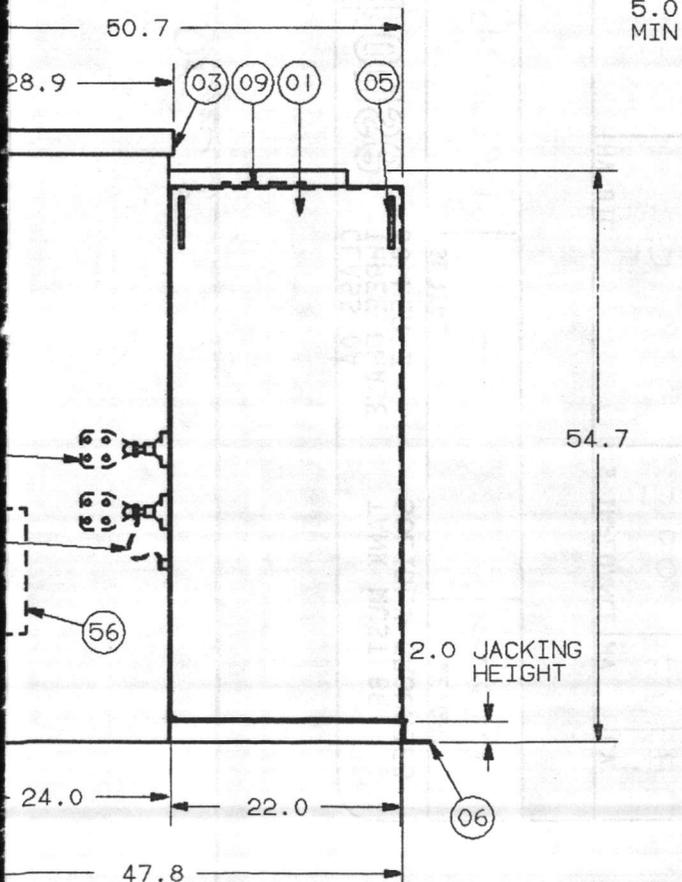
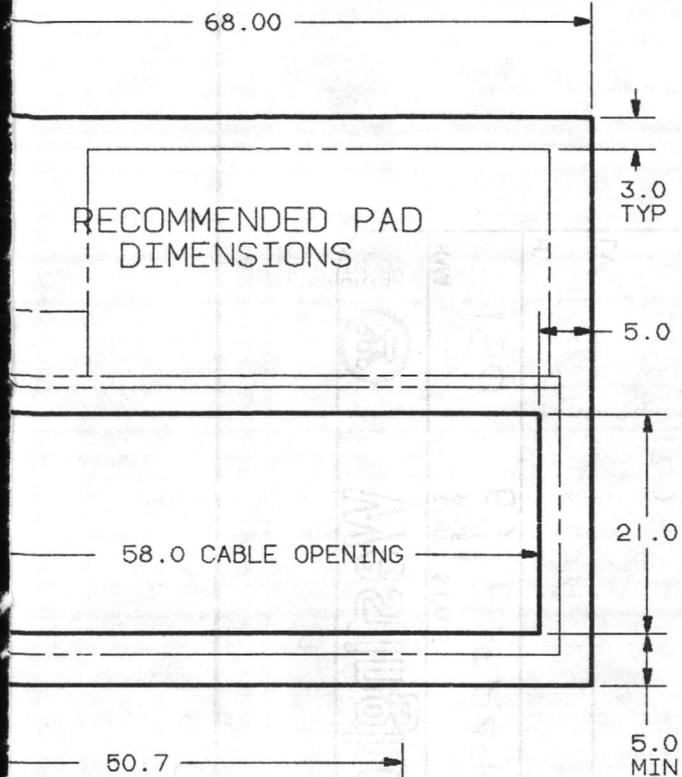


FRONT VIEW



THIS OUTLINE IS FOR ERECTION OR MOUNTING PURPOSES. IT IS NOT TO SCALE AND SHOULD NOT BE REGARDED AS INDICATING THE EXACT DETAILS OF CONSTRUCTION.

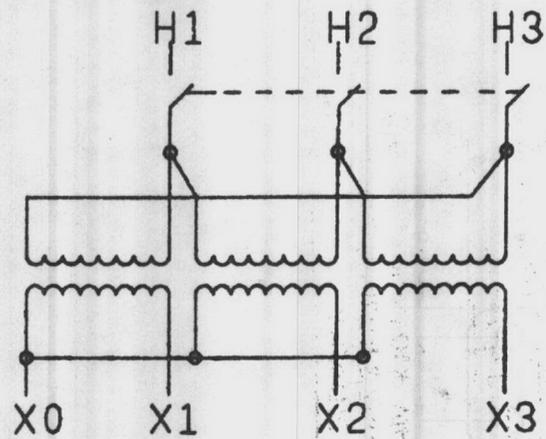
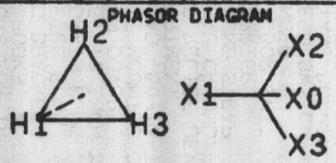
- 01 TANK
- 02 CABINET BOLTED-ON, REMOVABLE SILLS, OPEN BOTTOM 1 INCH FLANGE, HINGED LIFT-OFF DOOR, PROVISION FOR PADLOCK, STOP IN OPEN POSITION.
- 03 WEATHER COVER, REMOVABLE
- 04 PROVISIONS FOR TANK TO CABINET GROUND
- 05 LIFTING HOOKS, 4 TOTAL
- 06 SHIPPING BRACKETS
- 07 1 INCH FILL PLUG
- 08 1 INCH DRAIN PLUG
- 09 HANDHOLE, 10 INCH X 18 INCH, BOLTED-ON COVER
- 10 NAMEPLATE MOUNTED ON TANK WALL
- 11 GROUND PAD .50-13-TAP, HV AND LV COMPARTMENT
- 12 PRESSURE RELIEF DEVICE
- 13 LV NEUTRAL GROUND PAD .50-13-TAP WITH GROUND STRAP
- 14 HV/LV BARRIER
- 21 300 AMP LBOR SWITCH
- 25 TAP CHANGER
- 28 3-POLE EFD SWITCH
- 35 LOW VOLTAGE BUSHING
- 55 10KV LIGHTNING ARESSTOR
- 56 PROVISION FOR MOUNTING 1 LC3600 BRKR
- 65 PRESSURE VACUUM GAUGE
- 66 OIL GAUGE
- 67 THERMOMETER
- 68 DRAIN VALVE WITH SAMPLER



RIGHT VIEW

CUSTOMER: MADDUX SUPPLY CO		WESTINGHOUSE ELECTRIC CORPORATION		REV NO 01
GO&ITEM CH33095-003	H.V. 12470 DELTA	TITLE DL3PAAC	DEF XXX FIN XX U/M XX NOTE XX	
KVA 150	L.V. 208Y/120	DES XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		USER 183
REV DATA		DIMENSIONS IN INCHES-SCALE .11		CADAM AAA490210N00000#01.2
		DFTM L. HUESTE	080284	APPD
		D SPEC 42801		APPD
		ENG. REF XXXXXX	AAA1099490210N00000,1	7146C27
		UOTD ENGINEERING DEPT.		JEFFERSON CITY, MO. USA

Item 3.

		<h1 style="margin: 0;">Westinghouse</h1>		CLASS 0A THREE PHASE 60 HERTZ		TANK MUST BE SOLIDLY GROUNDED	
KVA	CONT RISE % FC	STYLE	SERIAL		WEIGHT		
150	65	A65A490X2M	—		3380		
HV 12470 DELTA							
LV		HV BIL		% IMPEDANCE		HV	LV
208Y/120		95		5.00		CU	AL
TAP CHANGER AND SWITCH				CAUTION: BEFORE OPERATING READ INSTRUCTION BOOK 46-060-1 FILLED WITH NON-PCB MINERAL OIL THAT CONTAINED LESS THAN 1 PPM AT TIME OF MANUFACTURE			
T A P	SWITCH POS 1	SWITCH POS 2					
	VOLTAGE	VOLTAGE					
1	13095						
2	12785						
3	12470						
4	12160						
5	11850						
PHASOR DIAGRAM 				MADE IN U.S.A. AT JEFFERSON CITY, MO.			
266P347H43		DISTRIBUTION TRANSFORMER		MINERAL OIL FILLED			

FEATURE AND DIMENSION LIST

GENERAL ORDER NUMBER CH33095 003 MADDUX SUP CO TYPE POW-R-PAD
 150.0 KVA 3 PHASE PAD MOUNTED TRANSFORMER STYLE A65A490X2M 60 HERTZ ERECTION OUTLINE 7146C27

NAMEPLATE DRAWING 8438A54H01 WIRING DIAGRAM IMP= 5.0 PERCENT WT= 3462 LBS OIL= 190 GAL
 HV 12470 CONDUCTOR= CU BIL 95
 TAPS + OR - (2) 2 1/2 PERCENT 1ST 13095 2ND 12785 3RD 12470 4TH 12160 5TH 11850
 LV 208Y/120 CONDUCTOR= AL BIL 30

FEATURES

- 3 PHASE PRIMARY DELTA CONNECTED
- LOOP FEED
- 21 = HV AIR SWITCH OR PROVISION FOR SAME (SELECT SWITCH IN FIELDS 19-20)
 HV BUSHING INTERNALLY CLAMPED
- 25 = TAP CHANGER EXTERNALLY OPERATED FROM HV COMPARTMENT
- 27 = 300 AMP LBOR
- 28 = W 3 POLE EFD AIR SWITCH (15 KV - 95 BIL) WITH (2) #6 TO 4/0 CONNECTORS
 3 PHASE LIVE FRONT LOOP HV PATTERN
- 35 = STANDARD LV BUSHING (EXTERNALLY CLAMPED)
 SPADE LV BUSHING TERMINATION
 STANDARD LOW VOLTAGE SPADE TERMINATION PER ANSI STANDARDS
 LV BUSHINGS, STAGGERED PATTERN, ANSI C57.12.26, FIG 3 & 4A, MIN DIMS
 W CURRENT-LIMITING HV CLT FUSE FOR EFD SWITCH (STANDARD KV APPLICATION
 STANDARD CLT FUSE APPLICATION FOR SINGLE OR CENTER POLE
- 55 = HV LIGHTNING ARRESTER
 10 KV HV LIGHTNING ARRESTER
 STANDARD LIGHTNING ARRESTER LOCATION
 PROVISIONS TO MOUNT TYPE LC AIR BREAKER
- 65 = THERMOMETER, LIC LEV GAUGE, VACUUM PR GAUGE LV - DRN VAL W/SAMPLER HV
 3.50 MINIMUM - 9.99 MAXIMUM IMPEDANCE
 MTR 24" DP, 1/2" HEX BOLTS HV DOOR & HANDLE, HINGED IF BAYONET FUSED

REFERENCE DRAWING = 7146C27F01

THIS OUTLINE IS FOR ERECTION OR MOUNTING PURPOSES. IT IS NOT TO SCALE AND SHOULD NOT BE REGARDED AS INDICATING THE EXACT DETAILS OF CONSTRUCTION.

DISTRIBUTION TRANSFORMER DIVISION

REPORT NO. 85-13

USE OF ADDITIONAL POWDERCOAT AS REPLACEMENT
OF BITUPLASTIC 28 FOR BOTTOMCOAT ON PADMOUNTED
DISTRIBUTION TRANSFORMERS

BY

D. J. STRUEMPH

FEBRUARY 5, 1985

APPROVED: James R. Miller
J. R. Miller, Manager
Design Implementation 2/5/85

APPROVED: J. D. Borst 2/5/85
J. D. Borst, Manager
Engineering Operations

DEVIATION: APPROVED

~~DISAPPROVED~~

LANTDIV REVIEWER

DATE

2938e-skx

AS NOTED

WESTINGHOUSE ELECTRIC CORPORATION
DISTRIBUTION TRANSFORMER DIVISION
JEFFERSON CITY, MISSOURI

JEC
11 JUL 1985

ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511

CONTRACT NO. 05-18502-2244

APPROVAL OF A SUBMITTAL DOES NOT INCLUDE
APPROVAL OF ANY DEVIATION FROM THE CON-
TRACT REQUIREMENTS UNLESS THE CONTRAC-
TOR CALLS ATTENTION TO AND SUPPORTS THE
DEVIATION..THE CONTRACTOR SHALL BE
RESPONSIBLE FOR PROVIDING PROPER
PHYSICAL DIMENSIONS & WEIGHTS, COORDINA-
TION OF TRADES ETC AS REQUIRED.

REVIEWER JEC DATE 11 JUL 1985

FOR OFFICER IN CHARGE OF CONSTRUCTION

ALL ANTHE DIVISION
FEDERAL BUREAU OF INVESTIGATION
COMMUNICATIONS SECTION

APPROVED AND FORWARDED:
SPECIAL AGENT IN CHARGE
DATE: 11 JUL 1962

CONTRACT NO. A5111111111111111
CONTRACT OF ASSIGNMENT FROM THE FBI
TO THE COMMUNICATIONS SECTION
DATE: 11 JUL 1962

REVIEWER
DATE OF COMPLETION

AS NOTED

APPROVED
DISAPPROVED
LAT/DIV REVIEWER
DATE

WESTINGHOUSE ELECTRIC CORPORATION

DISTRIBUTION TRANSFORMER DIVISION

USE OF ADDITIONAL POWERCOAT AS REPLACEMENT OF BITUPLASTIC 28 FOR
BOTTOMCOATING ON PADMOUNTED DISTRIBUTION TRANSFORMERS

SYNOPSIS

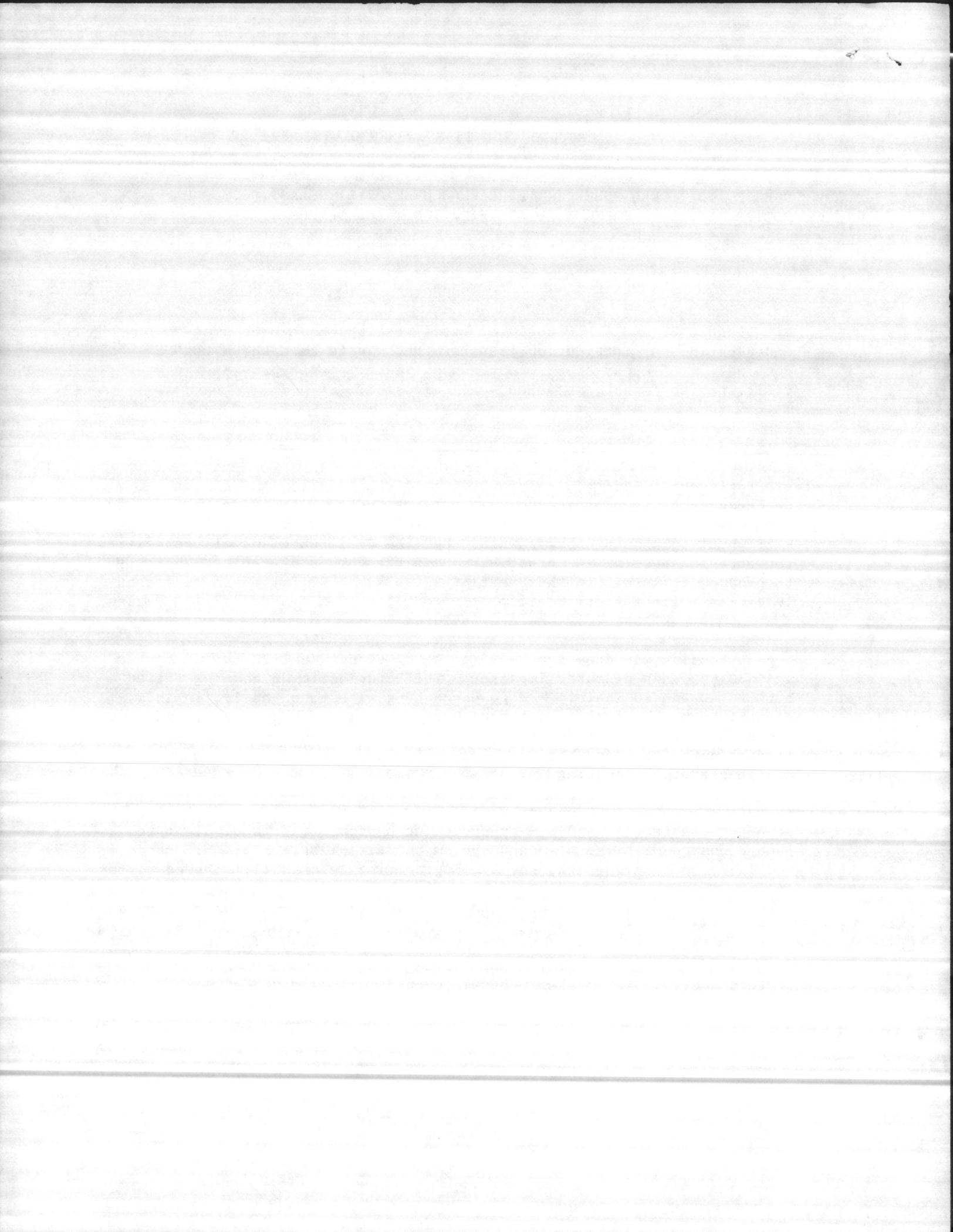
Bituplastic 28 and other coal tar based coatings have been used as undercoating on distribution transformers. Tests have shown that a combination of epoxy electrocoat and polyester powder provides greater resistance to impact, abrasion, and corrosion.

EXPERIMENTAL RESULTS

DTD Engineering Report 81-13 investigated the abrasion and impact resistance of Bituplastic 28 vs. polyester powder. Abrasion testing was done using a Taber abraser with H-22 wheels and 1000 gm weights. The H-22 wheel is a much coarser wheel than the CS-10 wheel usually specified for abrasion testing and greatly reduces the number of cycles necessary to produce failure. In this testing Bituplastic 28 failed in less than 10 cycles while a 3 mil coating of powder lasted a minimum of 100 cycles and as many as 190 cycles before failure.

Impact testing was done for 81-13 using a Gardner IG-1120 impact tester and a 0.625 inch diameter impactor. The Bituplastic 28 coating failed between 40 and 60 in-lb. The powdercoating withstood the 160 in-lb capability of the impact tester without failing. Subsequent testing has shown that heavier builds of powder (sometimes as low as 6-7 mils) may produce outgassing and honeycombing, which greatly reduce the impact resistance of the coating.

In salt spray testing conducted at Jefferson City, panels coated with the standard electrocoat and powder system were shown to be equivalent to panels coated with the standard system and Bituplastic 28. Salt spray testing conducted on tanks for DTD Engineering Report 81-17 showed better results on a powdercoated tank than on a tank which had an additional coat of Bituplastic 28. Corrosion resistance depends more on substrate preparation and the primer used than on film build. The phosphate system and epoxy electrocoat used at Jefferson City provide excellent corrosion resistance. DTD Engineering Report 83-12 shows that the standard Jefferson City paint system meets or exceeds all requirements of the EEI Finishing Guidelines for padmounted equipment, including the 1500 hour salt spray requirement.



Exposure tests conducted on Galveston Island have shown that Bituplastic 28 may actually reduce the corrosion resistance of the standard finish. After approximately 1.5 years of exposure, a panel coated with only the standard finish had 0.10 inch of underfilm corrosion from scribes made to bare metal. A section of the same panel which had an additional coat of Bituplastic 28 had up to 0.5 inch of underfilm corrosion. The Bituplastic 28 may have trapped moisture, leading to the increased corrosion. Other coal tar based coatings on test at the site cracked and lost adhesion after exposure.

EQUIPMENT MODIFICATIONS

In order to increase the powder build and insure complete coverage on tank bases modifications have been made in the Jefferson City paint system.

Two stationary guns were added to the three phase powder booth in July, 1982 to provide additional coverage to the bottom of three phase tanks.

During 1983 a change in the electrocoat solvent was made to increase the film thickness of the cationic epoxy electrocoat applied to all parts before powder coating. The film build of the electrocoat was improved from 0.5-0.7 mils to 0.8-1.0 mils.

An extra gun was added to the reciprocator on each side of the single phase powder booth during July of 1983. This increased the powder film thickness and improved coverage on all parts coated on this line.

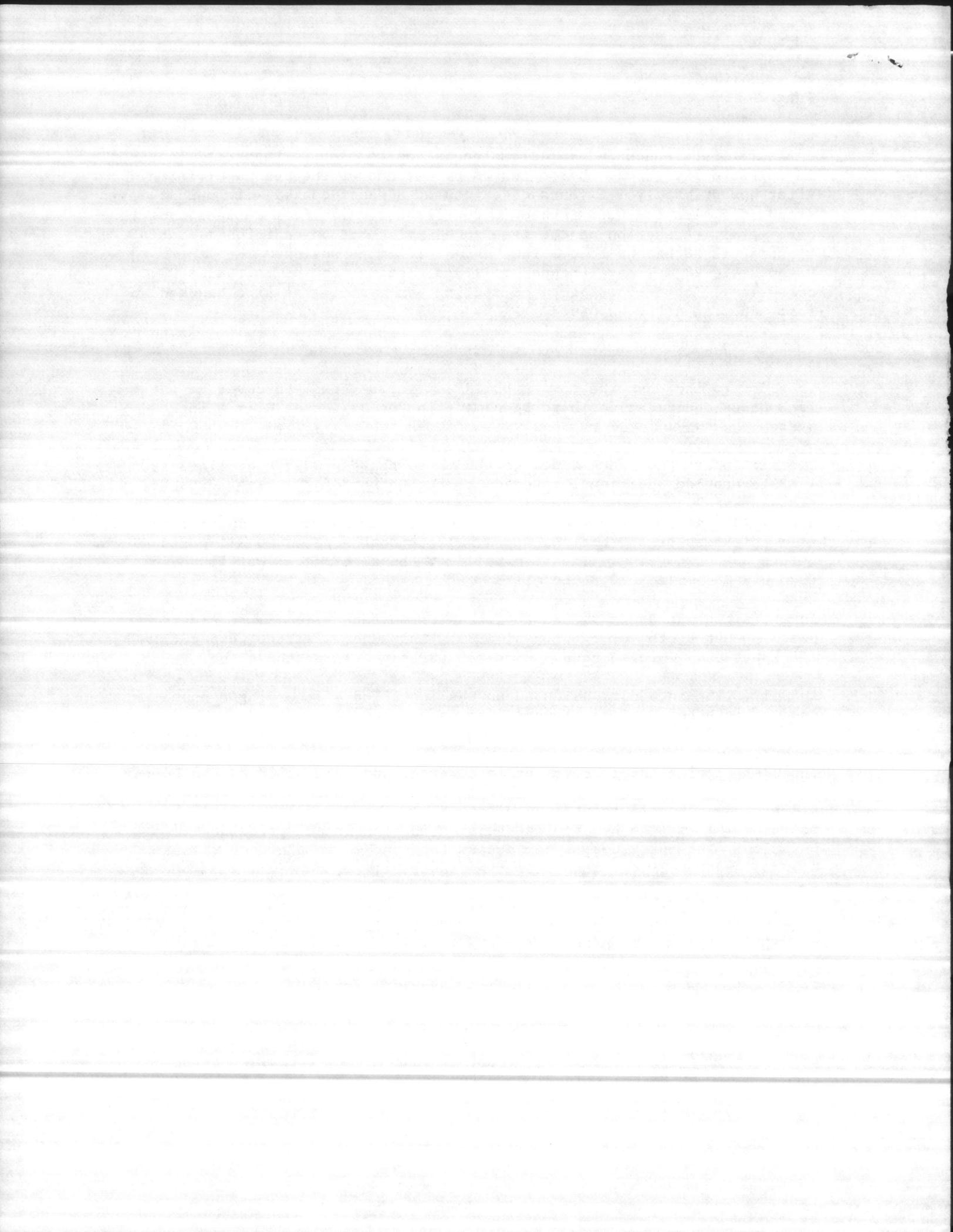
In July, 1984 an additional handgun was installed at the single phase powder booth to reinforce coverage on tank bases and other difficult to coat areas.

The most significant improvement in coverage and film build on the bottom of single phase tanks occurred when the single phase product line was redesigned. The old front load design tank was coated in an upright position whereas the new topload version is hung in an upside down position. This provides easier access for handgun reinforcement and allows powder to float down onto the tank base.

The result of all of these modifications is increased film build on areas near the pad on the completed units. Quality Assurance audits have shown the film build on the bottom of tanks is maintained at the desired 3-5 mil range.

CONCLUSION

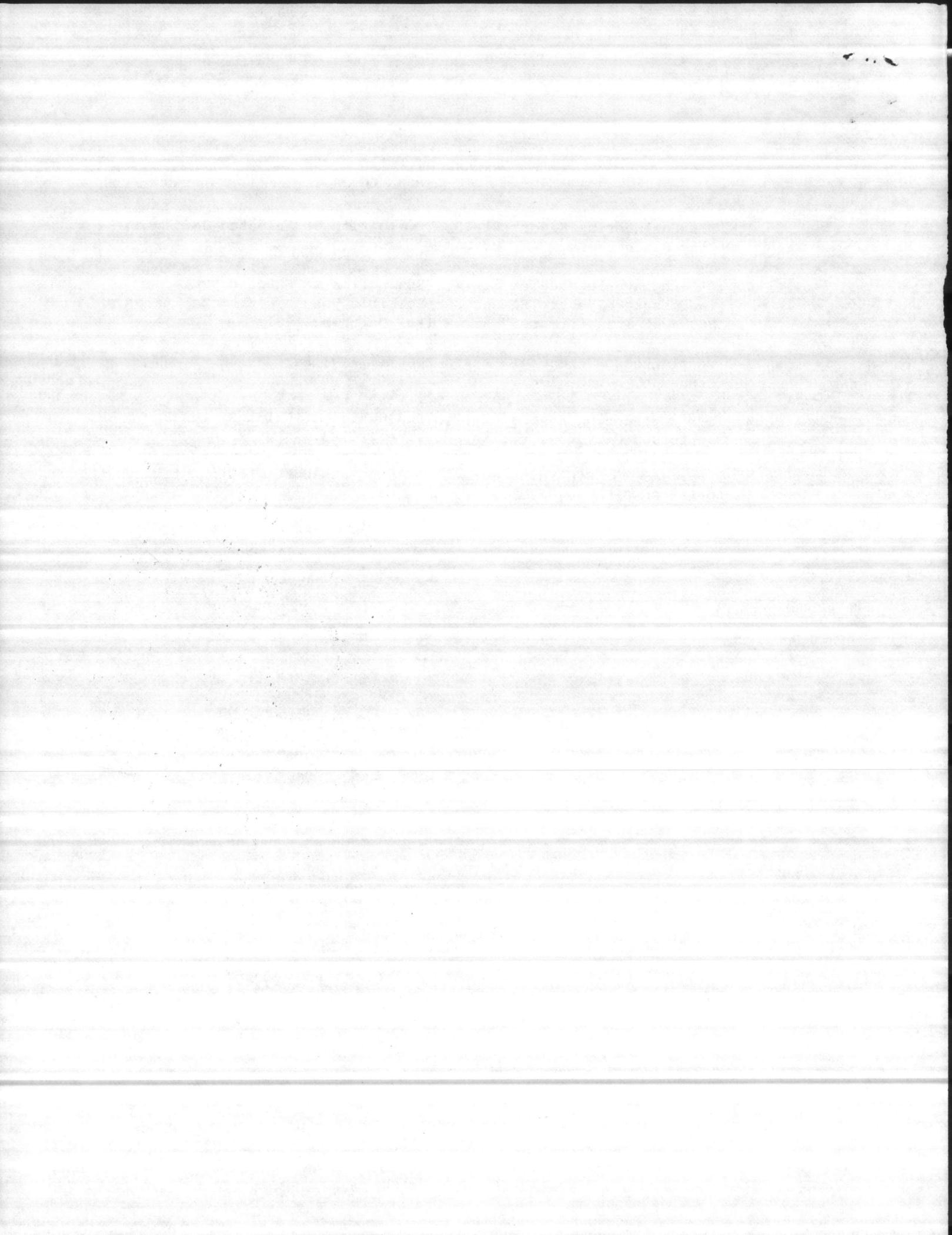
Based on laboratory testing and test site exposure an extra build of polyester powder provides more impact, abrasion and corrosion resistance than the use of Bituplastic 28 coal tar as bottomcoat for padmounted distribution transformers.



REFERENCES

1. DTD Engineering Report 81-13, "Evaluation Of Selected Jefferson City Bottomcoats," J. M. Donley, June 1981.
2. DTD Engineering Report 81-17, "Evaluation of Extra Build Thermoset Polyester Powder For Possible Use As Bottomcoating on Padmount Transformers," J. Hilko, October, 1981.
3. Westinghouse Permanent Record Book 161619, Page 30-32, D. J. Struempf, March, 1983.
4. DTD Engineering Report 83-12, "Evaluation Of Paint System For Jefferson City," J. Hilko, November, 1983.
5. Proposed EEI Finishing Guidelines for Padmounted Equipment, Draft 6, October, 1983.

2938e-skx



CONTRACTOR'S SUBMITTAL TRANSMITTAL
LANTDIV NORFOLK 4-4355/3 (Rev. 11-80)

CONTRACT NO N62470-82-C-2244	TRANSMITTAL NO 39-A	DATE 04-16-85
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FROM CONTRACTOR
WESTMINSTER COMPANY
TO
OICC, Camp Lejeune, NC

PROJECT TITLE AND LOCATION
**UNACCOMPANIED ENLISTED PERSONNEL HOUSING
MARINE CORPS BASE, CAMP JOHNSON
CAMP LEJEUNE, NORTH CAROLINA**

CONTRACTOR USE ONLY

REVIEWER USE ONLY

*List only one specification division per form.

****ACTION CODES**

List only one of the following categories on each transmittal form,
and indicate which is being submitted

- A-Approved
- D-Disapproved
- AN-Approved as noted
- RA-Receipt acknowledged
- C-Comments
- R-Resubmit

- Contractor Approved OICC Approval Deviation/Substitution
For OICC Approval

ITEM NO	PROJ. SPEC. SECT. & PARA. and/or PROJ. DWG. NO.	ITEM IDENTIFICATION (Type, size, model no., Mfg. name, dwg. or brochure number)	NO. OF COPIES	ACTION CODES	REVIEWER'S INITIALS CODE AND DATE
1	Sec. 16335 Para. 1.3	Pad Mount Transformers	7	↓ D	↓ OICC 404 5-9-85

CONTRACTOR'S COMMENTS

COPY OF TRANSMITTAL AND SUBMITTALS TO ROICC

CONTRACTOR REPRESENTATIVE (Signature)

DATE RECEIVED BY REVIEWER: 5/6/85
FROM (Reviewer): LANTDIV
TO: ROICC/WESTMINSTER

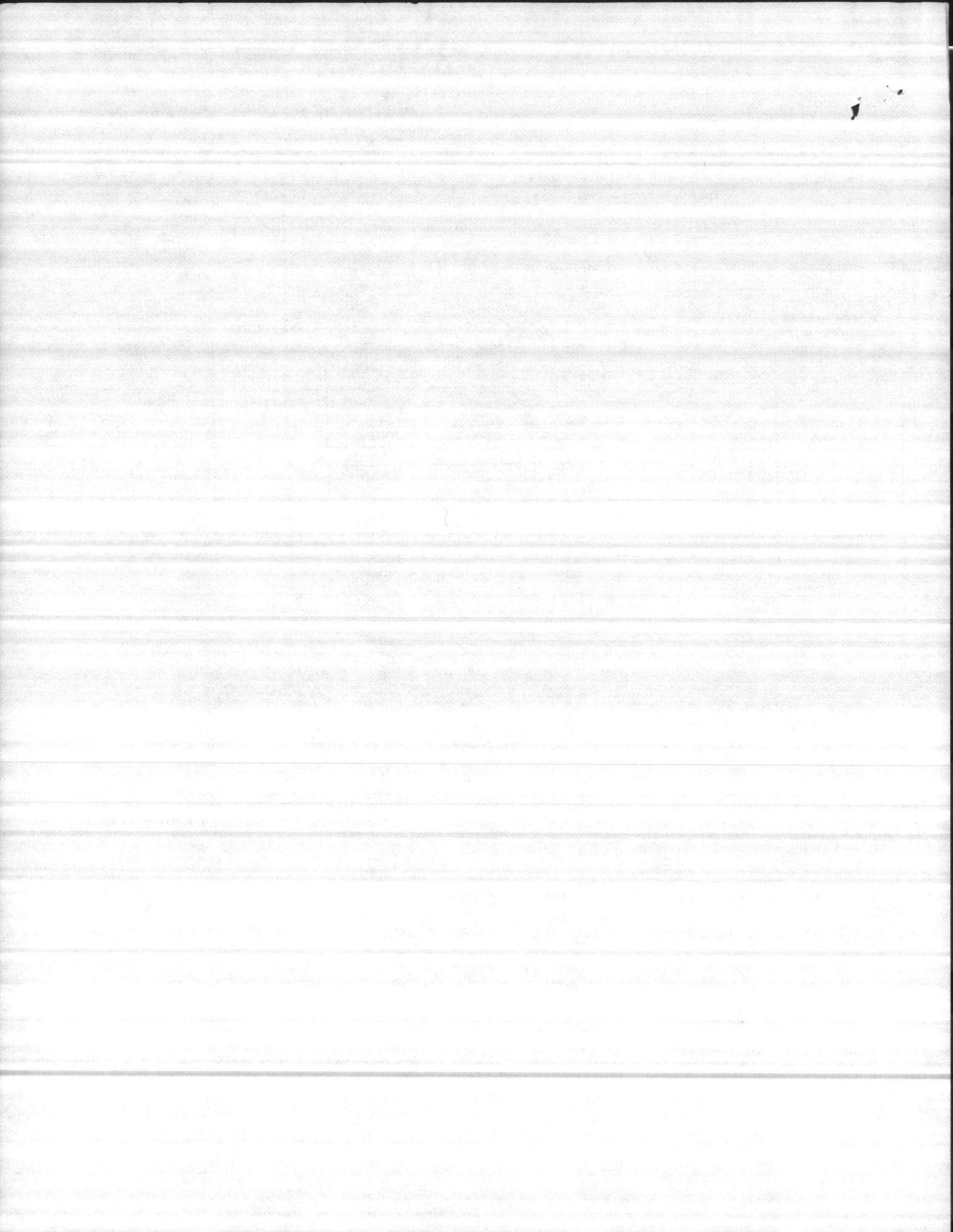
- Submittals are returned with action indicated. Approval of an item does not include approval of any deviation from the contract requirements unless the contractor calls attention to and supports the deviation.
- Submittals are forwarded to LANTDIV with A-E recommendations indicated in REVIEWER USE ONLY Section and in comments below on ONE COPY of the transmittal form.

REVIEWER'S COMMENTS

DISAPPROVED. LITERATURE DOES NOT INDICATE WEIGHT; OPERATING INSTRUCTION REF.; INSULATING OIL; TYPE OF CONDUCTORS; H.V. & L.V. DRAIN IS IN H.V. COMPARTMENT AND IS NOT ACCEPTABLE; UNDERCOATING IS NOT BY MANUFACTURER.

SUGGEST THAT THE CONTRACTOR OBTAIN THE SERVICES OF A WESTINGHOUSE TECHNICAL REP. TO RESOLVE THE NUMEROUS PROBLEMS WITH THIS EQUIPMENT NOT CONFIRMING TO THE SPECIFICATION.

COPIES TO: ROICC (2), LANTDIV (1), A E (1) DATE: 5/10/85 SIGNATURE: J. J. Hastie



SOUTHERLAND ELECTRIC COMPANY

ELECTRICAL CONTRACTORS

HIGHWAY 17, NORTH — P. O. BOX 626

JACKSONVILLE, NORTH CAROLINA 28540

Westminister
P.O. Box 1167
Jacksonville, N.C. 28540

"It is hereby ~~March 13, 1985~~ the (material) (equipment) shown and marked in this submittal, shop drawings, catalog cut(s), etc., and approved/proposed to be incorporated into Contract Number _____, in compliance with the contract and specifications, and can be installed in the allocated space, and is _____ approved for use submitted for Government approval.

Re: N62470-82-C-2244

UEPH-CLNC

Camp Johnson

Authorized Reviewer [Signature] Date 4/15/85

Gentlemen:

Signature CQC Rep _____ Date _____"

After a careful review and inspection of the pad mt. transformers for this job we find it has become necessary to submit three items as deviations from specifications.

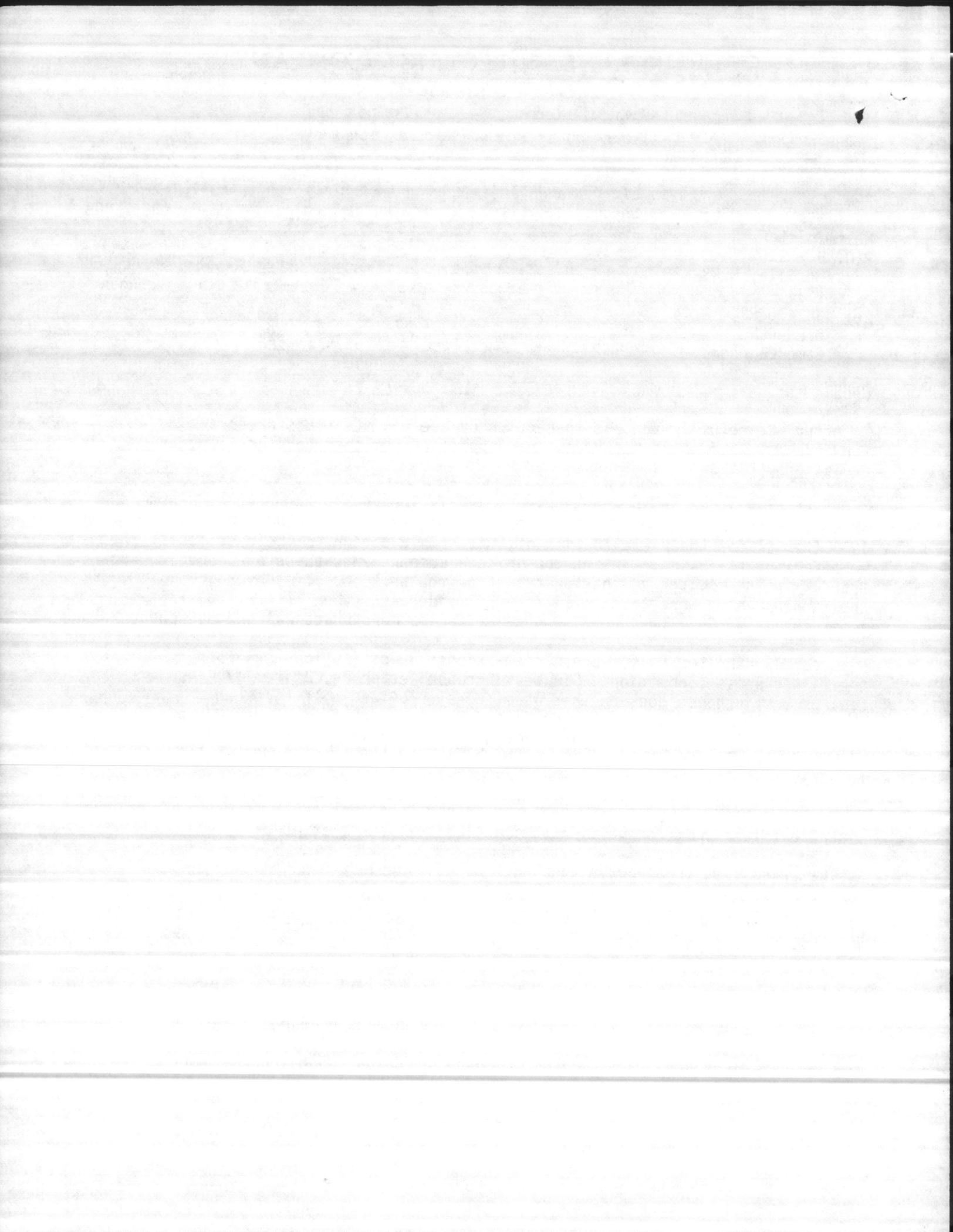
First of all the drain and sampler valve is located in the H.V. compartment in lieu of the L.V. compartment. See Westinghouse letter dated March 6, 1985 item #1 for their explanation of this. In addition to their comments we offer the following: In the low voltage compartments there are circuit breakers being mounted in the lower half of the section. If the drain and sampler valve were located in the L.V. side also, then it would be inaccessible. We feel that Westinghouse design is more practical in this case.

Secondly, the top filter press connection: Specifications call for a top filter press connection. See Westinghouse letter Pg. 3 item #7. We feel as Westinghouse does on this item. They provided a 1" threaded opening which may be used as a top filter press connection. It also can be used as a fill hole and location of the relief valve. Westinghouse uses this opening for these purposes when filling the transformer at the factory.

The deviation here, if any, would be in the fact that there is no separate filter press connection used exclusively for that purpose.

The third item is a low voltage neutral bushing in the high voltage compartment. Westinghouse did not provide this for the reasons given in their letter Pg.4. We are receptive to the idea of bonding the neutral and ground together with a lug mounted in the high voltage compartment. A low voltage neutral bushing with ground strap is provided in the low voltage section of the subject transformers.

We ask that these deviations be approved and that these transformers be used on this project. Approval of these deviations will not affect contract cost or completion, however, since these transformers are already on the jobsite it is very important to all concerned that we get these matters resolved.



March 6, 1985

Mr. Floyd Woods
Maddux Supply Company
P. O. Drawer 4067
Greenville, N. C. 27834

UEPH Job
CH 33095
Southerland Electric
Your Order 84E-651

Dear Floyd:

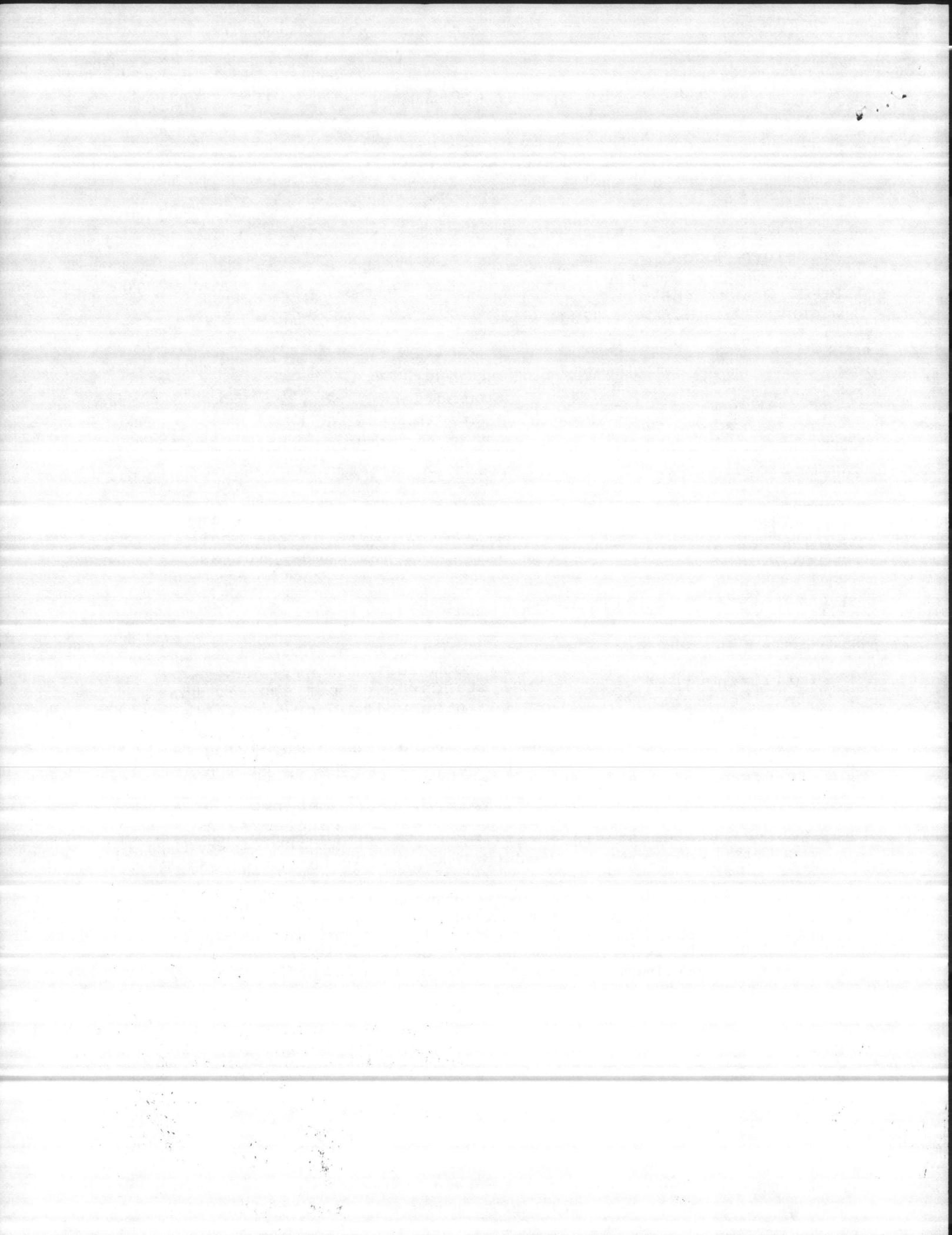
In response to your letter of February 15, 1985 concerning the rejection of the pad mounted transformers on the above referenced project, I would like to address each point as follows:

1. Report #169 - 4(A) Drain sample valve location

We locate our drain sample valve in the high voltage compartment as there is more room for customer when utilizing this valve. ANSI standards do not specify that this be located in either the high voltage or low voltage compartments and our design conveniently locates it in the high voltage compartment. We have been supplying this valve in this location for years. The specification in Paragraph 2.6.12 does state that the low voltage compartment contain gauges, valves, thermometers, low voltage bushings, etc., but this was interpreted as a general statement since all of these items are located in this compartment except the sampler drain valve.

2. Report #169-4(B) Interrupting capacity of the fuses as minimum 10,000 AIC

We have utilized CLT type fuses and as is indicated these fuses are minimum 25,000 AIC, which is better than minimum specified. (See attached literature PDL 46-300-13B).





Westinghouse
Electric Corporation

June 18, 1985

3701 National Drive
Box 10386
Raleigh, North Carolina 27605-0386

Mr. Eddie G. Holland
Southerland Electric Co.
P. O. Box 626
Highway 17N
Jacksonville, N.C. 28540

U.E.P.H. Camp LeJeune
Contract No. N6247082-C-2244
Our Order CH 33095
Maddux Supply Order 84E-651
Pad Mounted Transformers

Dear Eddie:

We are in receipt of the 5/10/85 transmittal from LANTDIV-Norfolk (copy attached) which rejected our pad mounted transformers on the above referenced project.

As you know, we have submitted several times and I believe all items in question heretofore have been cleared up and approved with the exception of those listed on this transmittal of 5/10/85.

I am attaching our drawings and literature which address the points in question as follows:

1. Weight:

Item 1	75 KVA Unit	2750#
Item 2	300 KVA Unit	APPROVED 866#
Item 3	150 KVA Unit	APPROVED 3462#
Item 4	112 1/2 KVA Unit	APPROVED 287#
Item 5	500 KVA Unit	SUBJECT 5958#

Literature - Feature and dimension list attached with weight highlighted for each.

2. Operating Instruction Reference:

Attached is I.B. 46-060-1-sect. D, which covers pad mounted transformers.

ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511

CONTRACT NO. N6247082-C-2244
SUBJECT: THE REQUIREMENTS OF

APPROVAL OF SUBMITTALS DOES NOT INCLUDE APPROVAL OF DEVIATION FROM THE CONTRACT REQUIREMENTS UNLESS THE CONTRACTOR CALLS ATTENTION TO AND SUPPORTS THE DEVIATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROPER PHYSICAL DIMENSIONS & WEIGHTS COORDINATION OF TRADES, ETC., AS REQUIRED.

REVIEWER: J.E.C. DATE: 11 JUL 1985

FOR OFFICER IN CHARGE OF CONSTRUCTION

AS NOTED

~~DISAPPROVED~~

J.E.C.
11 JUL 1985

LANTDIV REVIEWER

DATE



THE BOARD OF DIRECTORS
 OF THE COMPANY
 HAS APPROVED
 THE PROPOSED
 PLAN OF REORGANIZATION
 AND THE ISSUANCE OF
 NEW SHARES OF STOCK
 IN ACCORDANCE WITH
 THE PROVISIONS OF
 THE COMPANY'S CHARTERS
 AND BYLAWS.

APPROVED AND FORWARDED:

 SECRETARY

APPROVED AND FORWARDED:

 PRESIDENT

APPROVED AND FORWARDED:

 CHAIRMAN OF THE BOARD

1935

APPROVED

PRINTED REVIEWER

DATE

1 JUL 1935

June 18, 1985
Page 2

3. Insulating Oil:

Type WEMCO "C" per attached PDL 46-300-22A

4. Undercoating Not By Manufacturer:

See attached Report 85-13 concerning our undercoating which is superior to undercoating specified.

5. Type of Conductors:

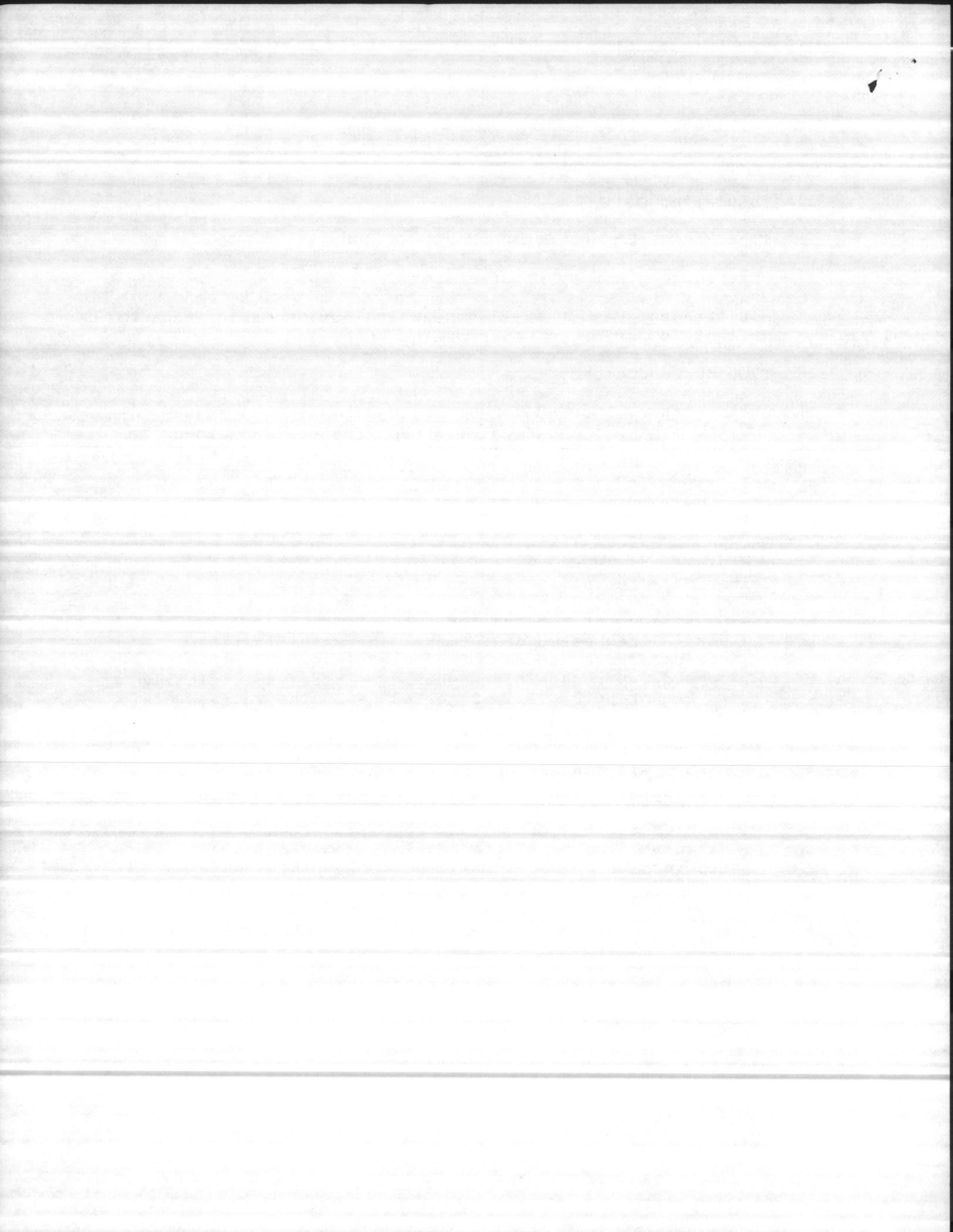
Shown either AL or cu for HV or LV depending on transformer. This is shown on attached "Feature and Dimension List dated 11/19/84 for each transformer, and is highlighted.

6. Drain Valve in High Voltage Compartment.

We have addressed this problem before and requested a deviation. (See your letter March 13, 1985; our letter of March 6, 1985, Item 1 - copies of both attached.)

On this point, we ask for reconsideration of our earlier requested deviation. The specifications are defective and cannot be performed in what we consider a reasonable manner. We refer specifically to Paragraph 2.6.1.2, Page 16335-5. The valves were mentioned in a general statement to be in the low voltage compartment in the first sentence. However, the last sentence states that the valves be readily accessible. Based on our interpretation and normal procedure, we mount the drain valve in the high voltage compartment when breakers and/or panels are mounted in the low voltage compartment such that the valve will be readily accessible. Our original drawings which were submitted showed this valve in the high voltage compartment, but we failed to note it as a deviation originally. Based on the way we build transformers when breakers and/or panels are located in the secondary, we consider it physically impossible and commercially impractical to mount the drain valve in the low voltage compartment.

Based on the above and the knowledge that we have



June 18, 1985

Page 3

shipped other transformers to Camp Lejeune which are now in service and which have the drain in the high voltage compartment, and the fact that the government possessed a "doctrine of greater knowledge" regarding a specification change from previous jobs requiring the drain valve to be in the low voltage compartment, we request the government accept these transformers, as they now exist on the job site and are ready to be energized.

Your prompt attention in addressing this reconsideration of our deviation would be appreciated as we would like to get this matter resolved.

Yours truly,

J. L. Vaughan
Sales Engineer

JLV:js

CC - Mr. Floyd Woods
Maddux Supply Company
Greenville, N.C.

10

SOUTHERLAND ELECTRIC COMPANY

ELECTRICAL CONTRACTORS
HIGHWAY 17, NORTH
JACKSONVILLE, NORTH CAROLINA 28540

ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
BOX 626
NORFOLK, VIRGINIA 23511

June 27, 1985

~~APPROVED~~
~~DISAPPROVED~~
APPROVED AS NOTED

SUBJECT TO THE REQUIREMENTS OF 2244

CONTRACT NO. 05-82-2244

APPROVAL OF A SUBMITTAL DOES NOT INCLUDE APPROVAL OF ANY DEVIATION FROM THE CONTRACT REQUIREMENTS UNLESS THE CONTRACTOR CALLS ATTENTION TO AND SUPPORTS THE DEVIATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROPER PHYSICAL DIMENSIONS & WEIGHTS. COORDINATION OF TRADES, ETC., AS REQUIRED.

REVIEWER *RSC* DATE 11 JUL 1985

FOR OFFICER IN CHARGE OF CONSTRUCTION

Westminster Company
P.O. Box 1167
Jacksonville, N. C. 28540

Re: N62470-82-C-2244
UEPH, CLNC
Pad Mounted Transformers

Gentlemen:

We have received more information and a verification concerning the pad mounted transformers on this job.

A copy of the reviewers comments is included, listing problem items. As you can see in Westinghouse's letter dated June 18, 1985, each item has been addressed. Item No. 6, which concerns the location of the drain and sampler valve, seems to be the major discrepancy. Westinghouse has ask for a reconsideration. Norfolk has already stated before that this is not acceptable.

We are concerned about this, and offer the following. If ROICC in Norfolk holds to their previous position on the location of the drain and sampler valve, but is satisfied with the other aspects of these transformers then we would like to see an "approved as noted" come back on the transmittal. We feel that with a note to "locate drain and sampler in low voltage compartment" we could resolve this problem.

We have knowledge that the device could be relocated; however, it would not be easily accessible in the low voltage side because of panelboards located there.

In any event, it is our wish to see the matter resolved without any delay to the project. Thank you for your cooperation.

Sincerely,

Eddie G. Holland
Eddie G. Holland

DEVIATION: APPROVED

DISAPPROVED

EGH:pi
Enclosure

LAMTDIV REVIEWER

DATE

AS NOTED

RSC

11 JUL 1985

NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511
ATLANTIC DIVISION

APPROVED AS NOTED
APPROVED
SUBJECT TO THE REQUIREMENTS OF 224
CONTRACT NO. 100-05
APPROVAL OF A SUBMITTAL DOES NOT INCLUDE
APPROVAL OF ANY DEVIATION FROM THE CON-
TRACT REQUIREMENTS UNLESS THE CONTRAC-
TOR CALLS ATTENTION TO AND SUPPORTS THE
DEVIATION. THE CONTRACTOR SHALL BE
RESPONSIBLE FOR PROVIDING PROPER
PHYSICAL DIMENSIONS & WEIGHTS. COORDINA-
TION OF TRADES, ETC., AS REQUIRED.

1985

11 JUL

DATE

FOR OFFICER IN CHARGE OF CONSTRUCTION

AS NOTED

DISAPPROVED

LANDIV REVIEWER

DATE

11 JUL 1985

TRANSMITTAL NO. 39-B

WESTMINSTER COMPANY

SECTION 16335 - EXTERIOR TRANSFORMERS, SUB-STATIONS, AND SWITCHGEAR

ITEM #1

PAD-MOUNTED TRANSFORMERS - RESUBMISSION

It is hereby certified that the (material) (equipment) shown and described in this submittal, shop drawings, catalog cut(s), etc., and proposed to be incorporated into Contract Number N62470-82-C-2244, is in compliance with the contract drawings and specifications, and can be installed in the allocated space and is approved for use submitted for Government approval.

Authorized Reviewer *M. H. Child* Date 6/27/85

Signature CQC Rep. *K. English* Date 6/26/85

10/10/11