CENTRAL OFFICE
AUDIBLE AND VISUAL
MAINTENANCE ALARM EQUIPMENT
EQUIPMENT DESIGN REQUIREMENTS
COMMON SYSTEMS

1. REASONS FOR ADDENDUM

This addendum includes information in NJ01046, Addendum 1 which was not given general distribution and is issued to add the following:

1.01 Existing Office Conversion Procedure.

1.02 NE01046-15 Typical Bay Cabling Plan.

1.03 NE01046-50 Aisle Terminal Strip and Pilot.

1.04 NJ01046A( ) Master Office Unit.

1.05 NJ01046B( ) Audible Alarm Relay Unit.

1.06 NJ01046C( ) Alarm Battery Supply Relay Unit.

1.07 NJ01046D( ) Visual Alarm Relay Unit.

1.08 NJ01046E( ) Aisle Pilot Control and Grouping Unit.

1.09 NJ01046AN( ) Master Office Audible Alarm Combining Unit.

1.10 Supplementary Information for New Units.

1.11 To Provide Table A Equipment Summary.

1.12 To Provide Fig. 4 Simplified Equipment Schematic.

1.13 The above changes are in accordance with NS01046-01, Issues 8B, 9B, and 11D.

2. CHANGES AND ADDITIONS

On Page 4

In Item 1.12 in Paragraphs 6 and 7

Change: SD-95072-01

To Read: SD-95072-01 or NS01078-02

On Page 5

Rate: Item 1.15 A&M

On Pages 4, 5, and 6

Remove: Items 1.14, 1.16, 1.17, 1.18, and 1.19

On Page 7

IN 1.25 ***ADD*** LAST SENTENCE

Circuit Drain information is shown on NS01046-01, Notes 101 and 110.

Add: 1.28

Conversion of Existing Offices to NS01046-01 Central Office Alarm System

In existing buildings, which utilize non NS01046-01 alarm systems, consideration may be given to converting the entire complex to this system should a large addition be planned or if present maintenance is overly burdensome.

The conversion procedure consists of installing and testing the new alarm system without connection to circuits requiring alarms and then converting by aisle, area, and floor to the new alarm system.

Job basis relay transfer circuits should be avoided, to preclude the possibility of simultaneous relay operation and/or the exclusion of a systems alarm due to a prior alarm condition in another alarm system.

For those buildings where equipment is owned by more than one customer, difficult situations may be precluded by providing a separate alarm system for each customer.

Add: 1.29

Other Alarm System Lead Conversion To NS01046-01

For those circuits requiring connection to alarms and furnishing ground, which are not designated as shown in Fig. 4, an appropriate lead conversion may be made by utilizing aisle terminal strip strapping.

Add: 1.30

Master Office Unit

The Master Office Unit, NJ01046A, combines in one unit the functions of four separate units previously described in Items 1.15, 1.16, 1.17, and 1.18.

The NJ01046A, Master Office Unit, performs the following functions:

(a) For the first seven floors or alarm zones of the alarm system, it provides a central combining point for all functional groups.

(b) Two sets of grouping relays provide a preset day and evening program.

(c) Four X-Y matrices provide a variable night program using shorting pins.

(d) A pushbutton switch and timer provide a choice of day, evening, or night programs on a repetitive weekly basis.

The unit consists of a 295A mounting plate equipped with eight AJ512 relays; a coordinated manual control, four position, illuminated pushbutton switch; a seven day repeat cycle timer; and four X-Y matrix boards. This mounting plate is joined to a 234A terminal strip with mounting bars, and a common cover is provided for the entire unit.

The panel is arranged with two sets of four relays, the operation of each set controlled by the alarm grouping control circuit.

Each set consists of a power failure grouping relay, a major grouping relay, a minor grouping relay and a service grouping relay. Each relay controls the functional leads for the class of alarm designated. For example, the power failure grouping relay controls the power failure leads (PF) for functional groups 1 to 9.

The A and B sections of the 234F terminal strip provide for termination of class-group leads from each floor or zone and connect via unit wiring to alarm group 1 relay contacts.

Operation of group 1 relays by the alarm grouping control circuit causes the audible alarm class group leads to be extended to punchings on terminal strip section C. Combining of audible alarm functional groups is accomplished by strapping on this section of the terminal strip.

Operation of group 2 relays is as described for group 1 relays except that the audible alarm class-group leads are extended to a different set of punchings on terminal strip Section D.

When both sets of alarm grouping relays are unoperated, the audible alarm class-group leads are extended from the relays to the appropriate matrix.

Additional contacts of the power failure groups 1 and 2 relays furnished alarm programming information to the alarm grouping control equipment.

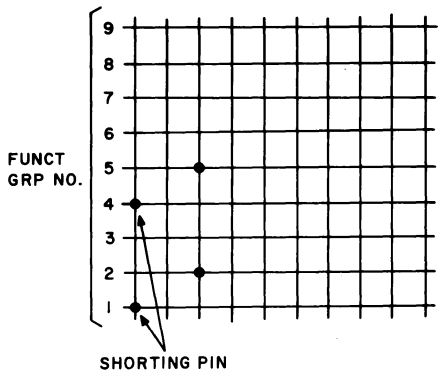
These relays provide the capability of two separate pre-established alarm programs and extend the audible alarm class-function leads to the X-Y matrices for additional programming.

The strapping of the terminal strips and X-Y matrices is a plant function.

The X-Y matrices are designated Power Failure, Major, Minor, and Service. Functional group leads 1 to 9 of each class, from the grouping relays, are terminated on each matrix.

A program is set up on a matrix by the insertion of shorting pins. Functional group leads 1 to 9 of each class from the grouping relays have a horizontal appearance on the appropriate matrix.

When shorting pins are inserted, a program is established. A maximum of ten independent programs can be established on each matrix. The illustration below shows a typical arrangement with groups 1 and 4 combined for one program and 2 and 5 on another.



The automatic and manual alarm grouping control function is provided by a coordinated manual control and repeat cycle timer. It provides automatic or manual control of the programming of the audible alarms by controlling the operation of the relay. It also provides a visual display indicating which program is in effect.

The coordinated manual control is a four position switch and indicator unit. Wiring is provided from the control switch to the grouping relays. Alarm battery and ground is furnished to the control from the alarm battery supply fuse panel. Position one of the switch transfers control of the alarm programming to the repeat cycle timer. Position two, three and four provide manual selection of the alarm programs.

The BB13680 repeat cycle timer has a continuously running motor which requires 115 volts, 60 cycles AC for its operation. Wiring from the timer terminates on the manual control. The timer is capable of controlling three alarm programs daily. The time when each program is placed in effect and the duration of each program is adjustable. The unit can maintain one program for preselected consecutive days. All programming will be repeated on a weekly basis with no further adjustments of the unit required.

Add: ALARM RELAY UNITS

1.31 The alarm relay unit, NJ01046B( ), is a shop-wired mounting plate equipped with a D5A terminal strip and wire spring relays. All relays are provided with diodes to minimize impulse noise. Alarm relay strapping requirements have been minimized by the list configuration and complete shop wiring of the unit. Each unit provides a complete complement of relays for one functional group, three relays for main aisle pilot usage, and a tone bar or alarm battery supply relay.

1.32 The alarm battery supply relay unit, NJ01046C( ), is a shop-wired mounting plate equipped with a D4A terminal strip and wire spring relays. All relays are provided with diodes to minimize impulse noise. Alarm relay strapping requirements have been minimized by the complete shop wiring of the unit. Each unit can accomodate ten relays each of which serve one ABS fuse panel.

Add: MASTER OFFICE AUDIBLE ALARM COMBINING TERMINAL STRIP

1.33 The master office audible alarm combining terminal strip, NJ01046AN, is a 234F terminal strip at which the class group leads and the alarm battery audible alarm control lead from each floor alarm bay are terminated. Interconnections are provided for class group leads cabled to the master office panel. Like leads are combined by the use of chain-form straps.

Space is provided for two master office audible alarm combining units in the master office bay. Each unit will serve up to seven floor alarm bays.

Add: ALARM SYSTEM CAPACITY

1.34 The number of floors or discrete areas that this system may accommodate is a function of the number of audible alarm groups that the customer wishes to combine. This is shown on the table below. When the office size exceeds or is expected to exceed the table limitations shown, a second system should be furnished.

TOTAL NUMBER OF FUNCTIONAL GROUPS COMBINED

	1	2	3	4	5	6	7	8	9
MAX # FLS/SYS,	32	32	24	18	14	12	10	9	8

ADD: AISLE PILOT CONTROL AND GROUPING PANEL

1.35 The aisle pilot control and grouping panel combines in one unit the functions previously provided by the NJ01046AH Floor Audible Alarm Control Unit and the NJ01046AJ Aisle Pilot Lamp Control Unit.

Aisle grouping terminal strip cross connection is part of a mounting plate equipped with eighteen 40 point connectors. It provides a terminating point, from each individual aisle or room terminal strip, for the basic audible control leads (class group leads). It also provides terminations for the class group leads cabled to the master office combining circuit and for control leads to audible alarm relays in the floor alarm bay, when those relays are required.

The interconnection of all leads of each class-group is accomplished by inserting preprogrammed printed wiring boards into the connectors. The printed wiring boards provide the correct interconnection, into each connector.

The initial unit has the capability of serving 20 aisles and shall be located in the floor alarm bay. Each additional frame will serve 20 aisles. Space has been provided in the floor alarm bay for two units. If additional units are required they may be located in any 23-inch bay on the floor. No more than two fully equipped units should be provided in any one bay to avoid cable congestion.

The asile pilot diode circuit is also part of the mounting plate and is equipped with terminal strips mounting 446F diodes. It provides a termination point for visual control leads R, G, and A from each of the aisle or room terminal strips. It permits the interconnection of like visual control leads, from aisle or room terminal strips, associated with the same main aisle pilot relay, while providing necessary isolation between the leads to the current flow in the reverse direction.

On Page 11

Remove: NJ01046AB
NJ01046AD
NJ01046AF

Rate: NJ01046AG A&M
J93009B A&M

Add: NJ01046A Master Office Unit
NJ01046B Alarm Relay Unit
NJ01046C Alarm Battery Supply Relay Unit
NJ01046D Visual Alarm Relay Unit
NJ01046AN Master Office Audible Alarm Combining PNL
NJ10146E Aisle Pilot Cont. and Grouping Panel

Under 3: Drawings

Remove: SD-95072-01, etc

Add: NS01078-02, etc

Add: NS01078-02, etc.

On Page 12
Under Subdivisions of Equipment

Add: NE01046-50 Aisle Terminal Strip and Pilot

Under Supplementary Drawing Information

Add: NE01046-15 Typical Bay Cabling Plan

Under: Wiring and Cabling

Rate: J93009B—(AT&TCo STD*) *A&M for NJ01046 Alarm System

Change: NJ01046A Reserved

To: NJ01046A (WECO Appd) Master Office Unit.

Equipment—NJ01046A-( )

List 1—Assembly, wiring and equipment master office unit per NJ01046-01 Fig. 38, 39, 40, and 41 and Cads 28, 29 and 30 (See Note A).

Notes

A. This unit, required once per alarm system, also includes wiring terminations for interconnecting the first seven floors or zones in the alarm system.

Add: NJ01046B (WECO Appd) Alarm Relay Unit

Equipment—NJ01046B-( )

List 1—Assembly, wiring and equipment for audible alarm relay unit per NS01046-01, Fig. 42 (See Note A).
List 2—Wiring and equipment for three main aisle pilot relay circuits per NS01046-01, Fig. 43
List 3—Wiring and equipment for one alarm battery supply relay circuit per NS01046-01, Fig. 45 (See Notes B and C).
List 4—Wiring and equipment for one tone bar relay circuit per NS01046-01, Fig. 44 (See Note B).
List 5—Wiring and equipment for one misc EQPT RM or power room or power area pilot relay per NS01046-01, Fig. 43 (See Note D).

Notes

A. List 1 includes all relays for one functional group.

B. Lists 3 and 4 may not both be ordered on the same unit.

C. List 3 is required once per floor alarm bay serving a floor or zone.

D. Lists 2 and 5 may not both be ordered on the same unit.

Add: NJ01046C(WECo Appd) Alarm Battery Supply Relay Unit

Equipment—NJ01046C-( )

List 1—Assembly, wiring and equipment for one ABS relay circuit per NS01046-01, Fig. 46 including circuit (1).
List 2—Wiring and equipment for one ABS relay circuit per NS01046-01, Fig. 46 for circuits (2) to (10).

Notes

A. One NS01046-01, Fig. 46 is required per 24, 48, and 130 volt ABS fuse panel.

Add: NJ01046D (WECo Appd) Visual Alarm Relay Unit.

Equipment—NJ01046D-( )

List 1—Assembly, wiring, and equipment for one main aisle pilot relay panel per NS01046-01 CAD 36.
List 2—Wiring and equipment for three main aisle pilot relays per NS01046-01, Fig. 43 (See Notes A and B).

Notes

A. A maximum of two List 2 may be provided per unit.

B. This unit should only be furnished when main aisles are added and there is no space available in the existing NJ01046B unit(s).

Add: NJ01046E (WECo Appd) Aisle Pilot Control and Grouping Panel.

Equipment—NJ01046E-( )

List 1—Assembly, wiring, and equipment for aisle pilot control and grouping panel for 20 aisles per NS01046-01, Fig. 49, 50 CAD 37 and 38.

NJ01046AM (WECo Appd) Aisle Pilot Lamp, Aisle Alarm Terminal Strip and Main Aisle Pilot Lamp Equipment

Equipment—NJ01046AM-( )

List 1—Equipment for aisle pilot lamp and aisle alarm terminal strip per NS01046-01, Fig. 28 and CAD 18 (See Note A)
List 2—Equipment for main aisle pilot lamps per NS01046-01, Fig. 19
List 3—Equipment for room or area pilot lamp for power equipment per NS01046-01, Fig. 30
List 4—Equipment for aisle pilot lamp for power equipment per NS01046-01, Fig. 28
List 5—Equipment for room or area pilot lamp per NS01046-01, Fig. 30

List 6—Equipment for pilot lamp for miscellaneous applications or building alarms per NS01046-01, Fig. 36

List 7—Equipment and wiring required in addition to List 1 to provide applique circuit for circuits requiring individual lamp displays per NS01046-01, Fig. 33. (Max 4 List 7 per List 1)

Notes

A. Furnish one List 1 for each aisle and see NE01046-50.

Under Equipment Add:

NE01046-50 (WECo Appd) Support Material For Aisle Alarm Terminal Strip and Aisle Pilot Lamp Mounting (See Notes A and B)

Equipment-NE01046-50
For Aisle Alarm Terminal Strip and Aisle Pilot Lamp Mounting (See Note (A) and (B)

Equipment-NE-01046-50

Group 1—Support required to mount aisle alarm terminal strip from main aisle cable rack.

Group 2—Support required to mount lamp mounting from main aisle cable rack

Group 3—Support required to mount aisle alarm terminal strip to wall or column

Group 4—Support required to mount lamp display panel from auxiliary framing

Group 5—Support required to mount aisle alarm terminal strip from auxiliary framing.

Group 6—Support required to mount lamp mounting from auxiliary framing

Notes

A. The bottom of each lamp support bracket shall be 9'-0" from the floor.

B. If an existing alarm system is converted to NS01046-01, aisle pilot lamps presently mounted in bay end guards shall remain there unless otherwise specified by the customer.

Add: NJ01046AN (WECo Appd) Master Office Audible Alarm Combining Terminal Strip Equipment NJ01046AN-( ).

List 1—Assembly, wiring, and equipment for one master office audible alarm combining terminal strip per NS010446-01, CAD 28. (See Note A)

Notes

A. The first NJ01046AN unit is included as part of the NJ01046A unit.

TABLE A

ITEM	J CODE	QUANTITY TO BE PROVIDED	SIZE NO. OF 2 x 23" MPs	LOCATION			
				MO	CMO	FLA	MISC
Master Office Unit	NJ01046A	1 per Alarm System	4-2" x 23		X		
Alarm Relay Unit	NJ01046B L-1	1 per 3 AA Appearances Functional Grp/Floor	1-2" x 23		X	X	
Main Aisle Pilot Relays	L-2	1 per Main Aisle					
ABS Aud Alm Rel	L-3	1 per Floor					
Tone Bar Rel	1-4	1 per 3 O.R. Tone Bars					
Misc Pilot Rel	L-5	As Reqd					
ABS FA Rel Unit	NJ01046C	1 Relay/ABS Fuse Pnl	1-2" x 23"		X	X	
Visual Alarm Relay Unit	NJ01046D	For Main Aisle Pilots As Reqd	1-2" x 23"		X	X	
Automatic and Manual Alarm Grouping Control Panel	NJ01046AB L-1 (MD)		2-1 3/4" x 19"	X	X		
	L-2 (MD)		2	X	X		
Interrupter (Optional)	NJ01046AB L3	1 per Alarm System	NA		X		
Lamp Display Relay Panel	NJ01046AC	1 (Max. 20 LPS/LOC) or 2 (Max. 40 LPS/LOC) per 5 Floors or Alarm Zones	1	X	X		
Building Alarm Relay Panel	NJ01046AC L-7	1 per 20 Building Alarms	1	X		X	
Master Office Grouping Relay Panel	NJ01046AD (MD)	1 per Alarm System	1	X	X		

TABLE A (Cont)

ITEM	J CODE	QUANTITY TO BE PROVIDED	SIZE NO. OF 2 x 23" MPs	LOCATION			
				MO	CMO	FLA	MISC
ESS #1 Conn Relay Panel	NJ01046AE	Maximum 1 per Alarm System	1			X	
Master Office Audible Alarm Grouping Panel	NJ01046AF (MD)	1 per 2 Alarm Systems	2	X	X		
Master Office Audible Combining Panel	NJ01046AG (MD)	1 per 8 Zones or Floors	2	X	X		
Floor Audible Alarm Control Panel	NJ01046AH	1st Per 17 Aisles 2nd & Thereafter Per 18 Aisles on a Floor	2			X	X
Aisle Pilot Lamp Control Unit	NJ01046AJ	1 per 34 Aisles on Floor	2			X	X
Lamp Display Control Unit	NJ01046AK	1 per Alarm Bay on a Floor	2	X	X	X	
Lamp Dis-Panel (10 LPS)	NJ01046AL	MISC BASIS Maximum 5 LOCS Per Floor and 4 Panels per LOC	NA				X
Aisle Terminal Strip and Pilot	NJ01046AM	1 per Aisle (See NE01046-50	NA				X
Master Office and Alm Comb Pnl	NJ01046AN	1 per 7 Zones or Floors (Max 1 per system)	2		X		
Misc Alarm Relay Unit	J93009B (MD for this System)	Misc Basis	8		X	X	

TABLE A (Cont)							
ITEM	J CODE	QUANTITY TO BE PROVIDED	SIZE NO. OF 2 x 23" MPs	LOCATION			
				MO	CMO	FLA	MISC
Audible Alarm Devices	ED96188-	Misc Basis Minimum 1 per functional group	NA				X
Aisle Terminal Strip and Pilot	NE01046-50	Support Material on Misc Basis	NA				X

LOCATION LEGEND

MO = Master Office Alarm Bay Provide When Ultimate is 16 or more floors (MD)
CMO = Combined Master and Floor Alarm Bay
FLA = Floor Alarm Bay
MISC = Miscellaneous Location
NA = Non Applicable

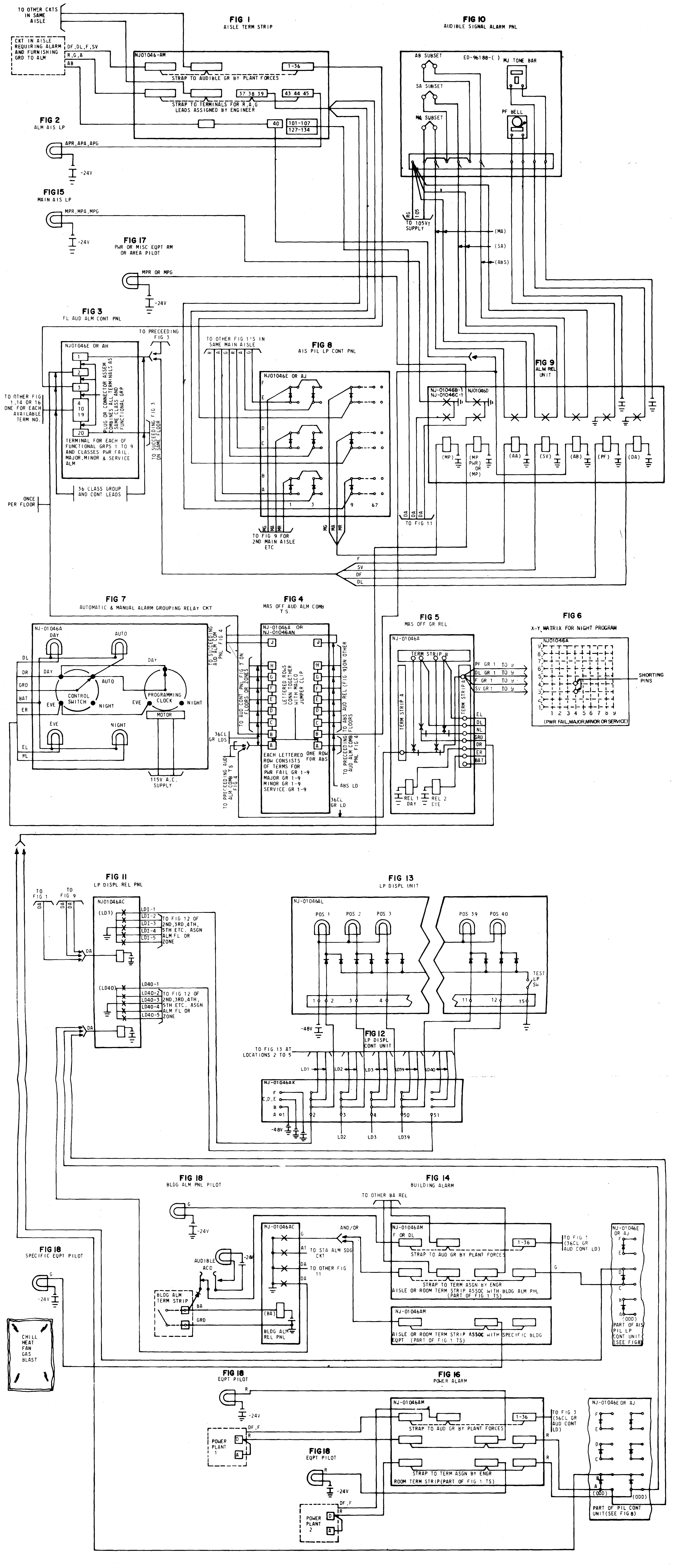


FIG 1
AISLE TERM STRIP
FIG 2
ALM AIS LP
FIG 3
FL AUD ALM CONT PNL
FIG 4
MAS OFF AUD ALM COMB T.S.
FIG 5
MAS OFF GR REL
FIG 6
X-Y MATRIX FOR NIGHT PROGRAM
FIG 7
AUTOMATIC & MANUAL ALARM GROUPING RELAY CKT
FIG 8
AIS PIL LP CONT PNL
FIG 9
ALM REL UNIT
FIG 10
AUDIBLE SIGNAL ALARM PNL
FIG 11
LP DISPL REL PNL
FIG 12
LP DISPL CONT UNIT
FIG 13
LP DISPL UNIT
FIG 14
BUILDING ALARM
FIG 15
MAIN AIS LP
FIG 16
POWER ALARM
FIG 17
PWR OR MISC EQPT RM OR AREA PILOT
FIG 18
BLDG ALM PNL PILOT
FIG 18
SPECIFIC EQPT PILOT
FIG 18
EQPT PILOT

Fig. 1-16

connectors, strapped to provide the correct interconnection, into each terminal strip.

The initial floor audible alarm control unit has the capability of serving seventeen aisles and shall be located in the floor alarm bay. Each additional frame will serve eighteen aisles. Space has been provided in the floor alarm bay for two audible alarm control units. If additional units are required they may be located in any 23 inch bay on the floor. No more than two fully equipped units should be provided in any one bay to avoid cable congestion.

Master Office Audible Alarm Combining Unit

1.15 The master office audible alarm combining unit, NJ01046AG, is a mounting plate equipped with a terminal strip arrangement at which the class-group leads and the alarm battery audible alarm control lead from each floor alarm bay are terminated. Interconnection is provided for class-group leads cabled to the master alarm grouping relay panel. Like leads are combined by the use of chain-form straps.

Space is provided for four master office audible alarm combining units in the master office bay. Each unit will serve eight floor alarm bays.

Master Grouping Relay Panel

1.16 The master grouping relay panel NJ01046AD, is a 158G mounting plate equipped with two H-816-182 terminal strips and eight AJ512 relays. The main panel is located in the master office bay.

The panel is arranged with two sets of four relays, the operation of each set controlled by the alarm grouping control circuit.

Each set consists of a power failure grouping relay, a major grouping relay, a minor grouping relay and a service grouping relay. Each relay controls the functional leads for the class of alarm designated. For example, the power failure grouping relay controls the power failure leads (PF) for functional groups 1 to 9.

Terminal strip "A" provides for termination of class-group leads from the master office audible alarm combining unit and connection via unit wiring to alarm group one relay contacts. It also provides for interconnection of wiring from contacts of group two relays to the master office audible alarm grouping frame.

Operation of group one relays by the alarm grouping control circuit causes the audible alarm class group leads to be extended to punchings of terminal strip "B". Combining of audible alarm functional groups is accomplished by strapping on this terminal strip. Operation of group two relays is as described for group one relays except that the audible alarm class-group leads are extended to a different set of punchings on terminal strip "B".

When both sets of alarm grouping relays are unoperated the audible alarm class-group leads are extended to the master office alarm grouping unit.

Additional contacts of the power failure groups one and two relays furnished alarm programming information to the alarm grouping control equipment.

This unit provides the capability of two separate pre-established alarm programs and extends the audible alarm class-function leads to the master office alarm grouping panel for additional programming.

The strapping of the terminal strips is a plant function.

Master Office Audible Alarm Grouping Unit

1.17 The master office audible alarm grouping unit NJ01046AF, is a mounting plate equipped with eight female forty point terminal strips. Four of the terminal strips are colored red. These are assigned to the initial alarm system. The other strips are colored white and are reserved for a second alarm system. The four terminal strips associated with each system are designated power failure, major, minor and service. Functional group leads one to nine of each class, from the grouping relay panel, are terminated on each terminal strip.

A pre-established program is set up by inserting a programmed male connector, its contacts strapped for the desired combining arrangement, into each terminal strip. The program of this frame is in effect when the two sets of relays on the grouping relay panel are in the released condition. Temporary grouping programs to meet abnormal conditions can be set up by using male patch plugs in place of the programmed connectors.

Automatic and Manual Grouping Control Panel

1.18 The automatic and manual alarm grouping control unit, NJ01046AB, is a 19 or 23 inch mounting plate equipped with a coordinated manual control and two repeat cycle timers. It provides automatic or manual control of the programming of the audible alarms by controlling the operation of the relays on the grouping relay panel. It also provides a visual display indicating which program is in effect. The list three timer can provide interrupter supplies required for the alarm system. The panel which is normally mounted in the master office bay can be located to meet plant operating forces needs, in any relay rack in the office.

The coordinated manual control is a four position switch and indicator unit. Wiring shall be provided from the control to the alarm grouping relay panel in the master office bay. Alarm battery and ground is furnished to the control from the alarm battery supply fuse panel. Position one of the switch transfers control of the alarm programming to the repeat cycle timer. Position two, three and four provide manual selection of the alarm programs.

The AA13601 repeat cycle timer has a continuously running motor which requires 115 volts 60 cycles A.C. for its operation. Wiring from the timer terminates on the manual control. The timer is capable of controlling three alarm programs daily. The time when each program is placed in effect and the duration of each program is adjustable. The unit can maintain one program for preselected consecutive days. All programming will be repeated on a weekly basis with no further adjustments of the unit required.

The optional NJ01046AB list 3 cycle timer, coded Y13630, is a plug-in unit powered by −24 volts D.C. which provides the various interrupter supplies required for the operation of the alarm system. It includes a built-in inverter which converts the −24 volts D.C. to 24 volts 60 cycles A.C. to operate the timer motor. In toll offices IPM supply shall be provided from the toll interrupter supply.

Aisle Pilot Lamp Control Unit

1.19 The aisle pilot lamp control unit, NJ01046AJ, is a mounting plate equipped with terminals mounting 420G diodes. It provides a termination point for visual control leads R, G and A, from the aisle or room terminal strips. It permits the interconnection of like visual control leads, from aisle or room terminal strips, associated with the same main aisle pilot relay, while providing necessary isolation between the leads to the current flow in the reverse direction. The aisle pilot lamp control unit shall be located in the floor alarm bay. Each lamp control unit will serve a maximum of thirty-four aisles or pilots for equipment furnished with individual pilots, or any combination thereof totaling thirty-four.

Lamp Display Control Unit

1.20 The lamp display control unit, NJ01046AK, is a 234D terminal strip located in each floor alarm bay and in the master office bay. Terminations are provided for alarm battery supply and lamp control leads from the master office bay, and terminations for cables to a maximum of five lamp display locations on the floor.

A twelve pair alarm tie cable shall be provided between the master office bay and the floor alarm bay serving major power plants. A six pair alarm tie cable shall be provided between the master office bay and the other floor alarm bays. The alarm tie cables shall be terminated on Rows 61 to 80 of the lamp display control unit terminal strip.

Lamp Display Relay Panel

1.21 The lamp display relay panel NJ01046AC, is a 158G mounting plate with ten AK2 relays wired to a H-816-169 terminal strip. All lamp display relay panels shall be located in the master office bay. Each relay panel furnished will serve two lamp display panels at each location on five floors. System arrangments provide for a maximum of five lamp display panel locations per floor and a maximum of four panels (40 lamps) at each location. Punchings are provided on the terminal strip for the termination of control leads for the lamp display relays. Alarm tie cable shall be used to extend the control leads from floor alarm bays to the master bay.

With each lamp display relay panel furnished, provide cabling for the twenty lamp control leads and alarm battery supplies required to the lamp display control unit in each of the floor alarm bays.