XDEF Sounds

XREF Alternator, SoundCounter, PlayTone, SendsChr, delaytimer, delayon, alarm, locknoise

XREF unlocknoise, elevator, delaytimers, delayons, delaytimert, delayont,delaytimerm,delayonm

XREF shutsound

;This file is where we store and play all of the different songs for the power plant.

; The length of the time is based on an alternator variable and the pitch of the sound

; is set by us.

; All of the songs are programed the same with different amount of notes to cyle though.

; The lenth of the song is based on how long the action the song is playing takes.

; The emergeny shutoff turns off when the user enters the proper ID

; The filling music, unlock and lock music finish when the process is finished

Sounds:

; File checks which sound is initiated

LDAA alarm

CMPA #1

BEQ alarmnoise

LDAA unlocknoise

CMPA #1

BEQ unlocknojmp

LDAA locknoise

CMPA #1

BEQ locknojmp

LDAA elevator

CMPA #1

BEQ elevatorjmp

LDAA shutsound

CMPA #1

BEQ shutjmp

locknojmp: JMP lockno

unlocknojmp: JMP unlockno

elevatorjmp: JMP elevatormusic

shutjmp: JMP shutmus

alarmnoise: MOVB #1, delayon ; Emergency shutoff music

LDAA delaytimer

CMPA #1

BGE skipset

MOVB #0, delaytimer

skipset: LDAA Alternator ; alternator dictates which note is currently playing

CMPA #1 ; must wait a specified delay time to switch notes

BEQ highnoise

LDAA #6

PSHA

JSR SendsChr ; send note to speaker

PULA

BRA increment

highnoise: LDAA #18 ; alarm has a high and low note that alternates

PSHA

JSR SendsChr

PULA

increment: LDAA delaytimer

CMPA #15

BEQ changenote

JMP end

changenote: MOVB #0, delaytimer

LDAA Alternator

CMPA #0

BNE ch1

MOVB #1, Alternator

JMP end

ch1: MOVB #0, Alternator

JMP end

unlockno: ; Unlock music

MOVB #1, delayont

LDAA delaytimert

CMPA #1 ; quick delay for fast alternation of notes

BGE skipsetd

MOVB #0, delaytimert

skipsetd: LDAA Alternator

CMPA #1

BEQ highnoised

LDAA #10

PSHA

JSR SendsChr ; play note on speaker

PULA

BRA incrementd

highnoised: LDAA #20

PSHA

JSR SendsChr ; play note on speaker

PULA

incrementd: LDAA delaytimert

CMPA #4

BEQ changenoted

JMP end

changenoted: MOVB #0, delaytimert

LDAA Alternator

CMPA #0

BNE ch1d

MOVB #1, Alternator

JMP end

ch1d: MOVB #0, Alternator

JMP end

lockno: ;Lock music, almost identical to unlock music

MOVB #1, delayont

LDAA delaytimert

CMPA #1

BGE skipsetc

MOVB #0, delaytimert

skipsetc: LDAA Alternator

CMPA #1

BEQ highnoisec

LDAA #10

PSHA

JSR SendsChr

PULA

BRA incrementc

highnoisec: LDAA #20

PSHA

JSR SendsChr

PULA

incrementc: LDAA delaytimert

CMPA #4

BEQ changenotec

JMP end

changenotec: MOVB #0, delaytimert

LDAA Alternator

CMPA #0

BNE ch1c

MOVB #1, Alternator

JMP end

ch1c: MOVB #0, Alternator

JMP end

elevatormusic: MOVB #1, delayont ; Filling music

LDAA delaytimert

CMPA #1

BGE skipsett

MOVB #0, delaytimert

skipsett:

LDAA Alternator ; many alterations for many notes

CMPA #1

BEQ highnoiset

LDAA Alternator

CMPA #2

BEQ midno

CMPA #3

BEQ amp

CMPA #4

BEQ ampy

CMPA #5

BEQ gampy

LDAA #10

PSHA

JSR SendsChr

PULA

BRA incrementt

gampy: LDAA #11

PSHA

JSR SendsChr

PULA

BRA incrementt

ampy: LDAA #9

PSHA

JSR SendsChr

PULA

BRA incrementt

amp: LDAA #8

PSHA

JSR SendsChr

PULA

BRA incrementt

midno: LDAA #12

PSHA

JSR SendsChr

PULA

BRA incrementt

highnoiset: LDAA #7

PSHA

JSR SendsChr

PULA

incrementt: LDAA delaytimert

CMPA #10

BEQ changenotet

JMP end

changenotet: MOVB #0, delaytimert

LDAA Alternator ; increment through different notes each cycle

INCA

STAA Alternator

CMPA #6

BLO endit

MOVB #0, Alternator

endit: JMP end

shutmus: ; Finish auto shutoff music, almost identical to filling music except

; with different notes

MOVB #1, delayont

LDAA delaytimert

CMPA #1

BGE skipseta

MOVB #0, delaytimert

skipseta:

LDAA Alternator

CMPA #1

BEQ highnoisea

LDAA Alternator

CMPA #2

BEQ midnoa

CMPA #3

BEQ ampa

CMPA #4

BEQ amper

CMPA #5

BEQ amperer

CMPA #6

BEQ finale

LDAA #10 ;12

PSHA

JSR SendsChr

PULA

BRA incrementa

finale: LDAA #5

PSHA

JSR SendsChr

PULA

BRA incrementa

amperer:LDAA #6

PSHA

JSR SendsChr

PULA

BRA incrementa

amper: LDAA #16

PSHA

JSR SendsChr

PULA

BRA incrementa

ampa: LDAA #14 ;4

PSHA

JSR SendsChr

PULA

BRA incrementa

midnoa: LDAA #12 ;25

PSHA

JSR SendsChr

PULA

BRA incrementa

highnoisea: LDAA #8 ;10

PSHA

JSR SendsChr

PULA

incrementa: LDAA delaytimert

CMPA #7

BEQ changenotea

JMP end

changenotea:

MOVB #0, delaytimert

LDAA Alternator

INCA

STAA Alternator

CMPA #7

BNE end

MOVB #0, shutsound

MOVB #0, Alternator

MOVB #0, delayont

MOVB #0, delaytimert

JMP end

end: JSR PlayTone

RTS