APPENDIX E - ASEAM3.0 FILES

E.1 Introduction

The ASEAM3.0 program comes on several diskettes. The files on these diskettes contain compiled code, source code, sample data files, and bin temperature and solar data files for forty-six stations across the United States.

ASEAM3.0 files are described briefly below. For each file, the filename (first eight characters), filename extension (three characters), and file size (bytes) are listed.

The filename (first eight characters) generally describes the function of the program (e.g., `AS3MENU' is the main menu program).

The filename extension (last three characters) generally describes the file type. The following extensions are used in ASEAM3.0:

E.2 File Types

E.2.1 Program Files

.BAS -   basic source code. There is a corresponding .EXE (compiled) file for each basic source code program.

.EXE - executable program.   These are compiled programs and there is a corresponding .BAS program for each executable program.

E.2.2 Data Files

.DAT - data file. These files contain data that are read by the programs.

.PRN - data file in LOTUS (tm) compatible form.

.RAN - random data file. These files are "random access" data files that are read by the programs.

.TMP - temporary data files. These files contain calculation results that is passed between calculation programs

.TXT - text data file. These data files contain primarily text.

.FRM - input form text files. These contain the abbreviated input forms found in Appendix B.7.

.RPF -   report format files. These files specify the format of various reports.

E.2.3 Input Screen Files

The input screen files contain data for formatting the screen appearance, setting field lengths, help messages, error limits, default values, etc. These are covered in more detail in Appendix C.

There are several extensions used for the input screen files:

.LIS -   loads input screen (used with AS3LDINP)
.SIS -   systems input screen (used with AS3SYINP)
.PIS -   plant input screen (used with AS3PLINP)
.MIS -   menu input screen (used with AS3MENU)
.LSD -   this extension is used for several input programs: Weather/Solar data input, ECO input, and Quick Input.

E.2.4 Bin Temperature Weather Data Files

The weather files containing the bin temperature data can have three different extensions depending on the type of bin data used:

.AWD -   ASHRAE weather data (bin data stored in six 4 hour blocks)
.BWD -   Battelle weather data (bin data stored in eight 3 hour blocks)
.DWD -   DOD weather data (bin data stored in three 8 hour blocks)

See Appendix A for a description of these files.

E.2.5 Solar Data Files

.NSD - solar data files. See Appendix A for a description of these files

E.2.6 Input Data Files (User Entered Data)

The data files you create in the various input programs each have different extension:

.LID -   loads input data (created in AS3LDINP)
.SID -   system input data (created in AS3SYINP)
.PID -   plant input data (created in AS3PLINP)
.QID -   quick input data (created in AS3QKINP)
.DAT -   BLCC input data (created in BLCC)
.LEC -   loads eco input data (created in AS3ECOIN)
.SEC -   systems eco input data (created in AS3ECOIN)
.PEC -   plant eco input data (created in AS3ECOIN)

E.2.7 Specify Analysis Data Files

.SRC -   single run mode specification data file
.BRC - batch run mode specification data file
.PRC - parametric run mode specification data file
.ERC - single eco run mode specification data file
.MRC - multiple eco run mode specification data file

E.2.8 Miscellaneous Files

.BAT - batch file. These contain DOS commands used for installing ASEAM3.0

.WK1 - lotus (tm) worksheet file.

.RPF -   report format files used with stand-alone reports program.

E.3 ASEAM3.0 Directory Files

The following files should be on the ASEAM3.0 directory.

```
filename.ext                      description
===============                   ============
AS3CPIP.EXE                       coordinated parametric input program
AS3LDINP.EXE                      loads input program
AS3MENU.EXE                       main menu program
AS3PLINP.EXE            plant input program
AS3SYINP.EXE                      systems input program
AS3CENTR.EXE                      central system calculation program
AS3COMLS.EXE                      common block deletion between loads and
systems programs
AS3COMSP.EXE                      common block deletion between systems and
plant programs
AS3ECON.EXE                       compares runs - performs economic analysis
AS3LOADC.EXE                      load calculation program
AS3PLANT.EXE                      plant calculation program
AS3PROCL.EXE                      loads pre-processor
AS3PROCP.EXE                      plant pre-processor
AS3PROCR.EXE                      run pre-processor
AS3PROCS.EXE                      systems pre-processor
AS3REPRT.EXE                      report generator program
AS3ECOIN.EXE                      eco input program
AS3LDREP.EXE                      load report (data echo) program
AS3PLREP.EXE                      plant report (data echo) program
AS3QKINP.EXE                      quick input program
AS3SYREP.EXE                      system report (data echo) program
AS3WDINP.EXE                      weather and solar data input program
AS3WDREP.EXE                      weather and solar report program
AS3UNITC.EXE                      unitary systems calculation program
BRUN45.EXE                        required to run compiled BASIC code (MicroSoft)
LIDAYCDT.LIS            loads input - daylighting control screen
LIDAYLDT.LIS            loads input - daylighting screen
LIDIVRDT.LIS            loads input - diversity factors screen
LIDOORDT.LIS                  loads input - doors screen
LIELECDT.LIS            loads input - electrical equipment screen
LIINFLDT.LIS            loads input - infiltration screen
LILITEDT.LIS            loads input - lighting screen
LIMCONDT.LIS                  loads input - miscellaneous conduction screen
LIMONDDT.LIS                  loads input - monthly diversity factors screen
LIMSENDT.LIS            loads input - miscellaneous sensible loads screen
LIOCCSDT.LIS            loads input - occupancy hours screen
LIPEOPDT.LIS            loads input - people screen
LIPRJ2DT.LIS            loads input - building/project 2 screen
LIPROJDT.LIS            loads input - building/project 1 screen
LIROOFDT.LIS            loads input - roofs screen
```

LISHADDT.LIS	loads input - external shading screen
LIWALLDT.LIS	loads input - walls screen
LIWNDODT.LIS	loads input - windows screen
LIZONEDT.LIS	loads input - zone screen
MICONDAT.MIS	specify analyses - configuration screen
MIDRIVES.MIS	specify analyses - data and weather subdirectory
MIECO2DT.MIS	specify analyses - single eco specification screen
MIECODAT.MIS	specify analyses - eco base case screen
MIMECO2D.MIS	specify analyses - multiple eco screen
MIMECO3D.MIS	specify analyses - multiple eco specification screen
MIOUT1DT.MIS	specify analyses - output screen (loads)
MIOUT2DT.MIS	specify analyses - output screen (systems/plant)
MIPAR1DT.MIS	specify analyses - parametric base case screen
MIPAR2DT.MIS	specify analyses - parametric input variable screen
MIPAR2N2.MIS	specify analyses - coordinated parametric input screen
MIPAR2NW.MIS	specify analyses - coordinated parametric input screen
MIPAR3DT.MIS	specify analyses - parametric output variable screen
MIRUNDAT.MIS	specify analyses - single/batch files screen
PIABCDAT.PIS	plant input-absorption chiller screen
PIBLRDAT.PIS	plant input-boiler screen
PICENDAT.PIS	plant input-centrifugal chiller screen
PIDBCDAT.PIS	plant input-double bundle chiller screen
PIDHWDAT.PIS	plant input-domestic hot water screen
PIENEDAT.PIS	plant input-energy cost and conversion screen
PIMECDAT.PIS	plant input-miscellaneous energy consumption screen
PIRECDAT.PIS	plant input-reciprocating chiller screen
PITOWDAT.PIS	plant input-cooling tower screen
SIAIRDAT.SIS	systems input-zone air screen
SIBBDAT.SIS	systems input-baseboard screen
SICLGDAT.SIS	systems input-cooling screen
SIDXDAT.SIS	systems input-direct expansion screen
SIFANDAT.SIS	systems input-fan screen
SIFURDAT.SIS	systems input-furnace screen
SIHPCDAT.SIS	systems input-heat pump cooling screen
SIHPHDAT.SIS	systems input-heat pump heating screen
SIHTGDAT.SIS	systems input-heating screen
SIHUMDAT.SIS	systems input-humidification screen
SIOACDAT.SIS	systems input-outside air screen
SIPRHDAT.SIS	systems input-preheat screen
SISYSDAT.SIS	systems input-system type screen
SIZONDAT.SIS	systems input-zone-system assignment screen
PVINPDES.TXT	parametric variable input descriptions
PVOUTDES.TXT	parametric variable output descriptions
IESDAYL.DAT	data file for daylighting calculations
AS3DRIVE.DAT	data file storing drives and subdirectories
HOURLYDT.RAN	data file for load calculations
ORIENTDT.RAN	data file for load calculations
BATCHCOM.BAT	file for compiling ASEAM3.0
QIFILES.DFT	contains listing of quick input default files

QIBLDGDF.PRN	building default data file for quick input
QICLIMDF.PRN	climate default data file for quick input
QINONDDF.PRN	miscellaneous default data file for quick input
QISPCEDF.PRN	space default data file for quick input
QIZONEDF.PRN	zone default data file for quick input
REP1PABS.RPF	report format file for absorption chiller
REP1PBLR.RPF	report format file for boiler
REP1PCEN.RPF	report format file for centrifugal chiller
REP1PDBC.RPF	report format file for double bundle chiller
REP1PDBH.RPF	report format file for double bundle chiller
REP1PDHW.RPF	report format file for domestic hot water
REP1PREC.RPF	report format file for reciprocating chiller
REP1PTOW.RPF	report format file for cooling tower
REP1SA.RPF	report format file for systems report SA
REP1SB.RPF	report format file for systems report SB
REP1SC.RPF	report format file for systems report SC
REP1SD.RPF	report format file for systems report SD
REP1SLDS.RPF	report format file for plant report SLDS
OIBBDAT.LSD	systems eco - baseboard screen
OICLGDAT.LSD	systems eco - cooling screen
OIDAYCDT.LSD	loads eco - daylighting control screen
OIDAYLDT.LSD	loads eco - daylighting screen
OIDIVRDT.LSD	loads eco - diversity factors screen
OIDOORDT.LSD	loads eco - doors screen
OIDXDAT.LSD	systems eco - direct expansion screen
OIFANDAT.LSD	systems eco - fan screen
OIFURDAT.LSD	systems eco - furnace screen
OIHPCDAT.LSD	systems eco - heat pump cooling screen
OIHPHDAT.LSD	systems eco - heat pump heating screen
OIHTGDAT.LSD	systems eco - heating screen
OIHUMDAT.LSD	systems eco - humidification screen
OIINFLDT.LSD	loads eco - infiltration screen
OILITEDT.LSD	loads eco - lighting screen
OIMCONDT.LSD	loads eco - miscellaneous conduction screen
OIMELEDT.LSD	loads eco - electrical equipment screen
OIMSENDT.LSD	loads eco - miscellaneous sensible load screen
OIOACDAT.LSD	systems eco - outside air screen
OIOCCSDT.LSD	loads eco - occupied hours screen
OIPRHDAT.LSD	systems eco - preheat screen
OIPRJ2DT.LSD	loads eco - project/building screen #2
OIROOFDT.LSD	loads eco - roofs screen
OIWALLDT.LSD	loads eco - walls screen
OIWNDODT.LSD	loads eco - windows screen
OIZONEDT.LSD	loads eco - zone thermostat screen
OIABCDAT.LSD	plant eco - absorption chiller screen
OIDHWDAT.LSD	plant eco - domestic hot water screen
OIMECDAT.LSD	plant eco - miscellaneous energy consumption screen
OICENDAT.LSD	plant eco - centrifugal chiller screen
OIDBCDAT.LSD	plant eco - double bundle chiller screen
OIRECDAT.LSD	plant eco - reciprocating chiller screen
OITOWDAT.LSD	plant eco - cooling tower screen
OIENEDAT.LSD	plant eco - energy cost screen
OIBLRDAT.LSD	plant eco - boiler screen

ECODESCR.LSD	eco description screen
LOADECOS.LSD	loads eco - types of loads ecos screen
LDSRESET.LSD	loads eco - zone loads reset screen
SYSTECOS.LSD	system eco - types of systems ecos screen
SYSRESET.LSD	systems eco - plant loads reset screen
PLNTECOS.LSD	plant eco - types pf plant ecos screen
QIPLTADT.LSD	quick input system-plant assignment screen
QIPLTDAT.LSD	quick input plant data screen
QIPROJDT.LSD	quick input building data screen
QIQZDFDT.LSD	quick input building shape and orientation screen
QISYS1DT.LSD	quick input zone-system assignment screen
QISYSDAT.LSD	quick input system type screen
WISOLDAT.LSD	weather data input solar screen
WITMPDAT.LSD	weather data input bin temperature screen
DEFLTPLT.PID	plant default input data - quick input
DEFALTBB.SID	system baseboard default data - quick input
DEFALTHV.SID	system heating/ventilating default data - quick input
DEFALTUH.SID	system unitary heater default data - quick input
DEFLTCVR.SID	system constant volume reheat default data - quick input
DEFLTFCU.SID	system fan coil unit default data - quick input
DEFLTWAC.SID	system window air conditioner default data-quick input
DFLTAAHP.SID	system air source heat pump default data - quick input
DFLTDDMZ.SID	system dual duct multizone default data - quick input
DFLTFURN.SID	system furnace default data - quick input
DFLTSZRH.SID	system single zone reheat default data - quick input
DFLTVAVR.SID	system variable air volume default data - quick input
DFLTWSHP.SID	system water source heat pump default data - quick input
DFTCBVAV.SID	system ceiling-bypass VAV default data - quick input
AS3TEMPL.WK1	lotus template for formatting reports
DOGRAPH.WK1	sample lotus file to demonstrate parametric features
SAMPLE.WK1	sample lotus file to demonstrate parametric features
QIDEFALT.WK1	lotus template for viewing Quick Input default values

E.4 ASEAM3.0 Data Disk

The data disk contains many "DEMO" files for the input programs and output reports. The Chicago bin temperature and solar files are also found on this diskette.

E.5 ASEAM3.0 Source Code Files

The ASEAM3.0 source code files are not normally stored in the ASEAM3.0 directory.

The first eight characters of the source code filenames are identical to the first eight characters of the executable files (EXE extension) listed above in the ASEAM3.0 DIRECTORY FILES.

E.6 Bin Temperature Weather Data

All bin temperature (all ASHRAE format - AWD filename extension) and solar weather files (NSD filename extension) have the same first eight characters to identify the station. The first six characters identify the city; the last two characters identify the location's state. Unless you plan to use weather stations as a parametric variable, only selected stations should be copied to the hard disk.

filename.ext	bin temperature data for
============	=========================
ALBUQRNM.AWD	Albuquerque, New Mexico
AMARLOTX.AWD	Amarillo, Texas
ATLNTAGA.AWD	Atlanta, Georgia
BIRMHMAL.AWD	Birmingham, Alabama
BISMRKND.AWD	Bismarck, North Dakota
BOISE-ID.AWD	Boise, Idaho
BOSTONMA.AWD	Boston, Massachusetts
BRNSVLTX.AWD	Brownsville, Texas
CHEYNEWY.AWD	Cheyenne, Wyoming
CHICGOIL.AWD	Chicago, Illinois
CHRLTNSC.AWD	Charleston, South Carolina
CLEVLNOH.AWD	Cleveland, Ohio
DALLASTX.AWD	Dallas, Texas
DAYTONOH.AWD	Dayton, Ohio
DENVERCO.AWD	Denver, Colorado
DESMONIA.AWD	Des Moines, Iowa
DETROTMI.AWD	Detroit, Michigan
DODGCTKN.AWD	Dodge City, Kansas
ELPASOTX.AWD	El Paso, Texas
GRTFALMT.AWD	Great Falls, Montana
INDAPLIN.AWD	Indianapolis, Indiana
KANCTYMO.AWD	Kansas City, Missouri
LASVEGNV.AWD	Las Vegas, Nevada
LITLRKAR.AWD	Little Rock, Arkansas
LKCHASLA.AWD	Lake Charles, Louisiana
LOSANGCA.AWD	Los Angeles, California
MADISNWS.AWD	Madison, Wisconsin
MEDFRDOR.AWD	Medford, Oregon
MIAMI-FL.AWD	Miami, Florida
MINAPLMN.AWD	Minneapolis, Minnesota
NASHVLTN.AWD	Nashville, Tennessee
NEWYOKNY.AWD	New York City, New York
OKHMCTOK.AWD	Oklahoma City, Oklahoma
OMAHA-NB.AWD	Omaha, Nebraska
PHOENXAZ.AWD	Phoenix, Arizona
PITSBRPA.AWD	Pittsburgh, Pennsylvania
PORTLNME.AWD	Portland, Maine
PORTLNOR.AWD	Portland, Oregon
RALEGHNC.AWD	Raleigh, North Carolina

SALTLCUT.AWD	Salt Lake City, Utah
SANANTTX.AWD	San Antonio, Texas
SEATTLWA.AWD	Seattle, Washington
STLOUSMO.AWD	St. Louis, Missouri
TALHASFL.AWD	Tallahassee, Florida
TAMPA-FL.AWD	Tampa, Florida
WASHNTDC.AWD	Washington, District of Columbia
WEAFILES.WKS	LOTUS (tm) worksheet file for weather station database

E.7 Solar Data

The solar data files have the same first eight characters as the station's bin temperature files. The filename extension for all solar data files is '.NSD'.