A Generalized Budget Simulation Installation Manual for Budget Simulation System

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SEA GRANT COLLEGE PROGRAM
TEXAS A&M UNIVERSITY

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INTRODUCTION

This manual and accompanying tape[1] enable the user to install and test either the Aquaculture Budget Simulation System or the Vessel Budget Simulation System. The basic design of each system is similar enough that installation procedures are the same except for reference-to-file names specific to one system or the other. This manual is written in general terms; specific references to the individual systems are in the tables.

The Budget Simulation System (BSS) contains two programs, COBOL and FORTRAN. The BSS is designed to create and maintain an inventory of data for firm operation (either vessel or aquaculture facility). These functions are provided by the COBOL program. Retrieval of specific pieces of data, creation and maintenance of the tax table, and actual simulation of the firm's financial activity occurs in the FORTRAN program (Figure 1). The BSS also requires a set of files to support its stored budget processing capabilities and additional files to use as temporary scratch pads for current runs. Correct BSS installation not only demands compilation of source codes, but also provision of the support file access that the system requires.

The basic steps for installation and testing of the BSS include:

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[1]The accompanying tape is a standard, non-labeled tape, LRECL 80, Block size 6160 and 1600 BPI. There are five data sets on it in the following order: (1) SBINIT, Texas A&M utility program; (2) COBOL source code; (3) COBOL control flow; (4) FORTRAN source code; (5) FORTRAN control flow.

1. COBOL program

    a. Create DATASTRM file

    b. Create Stored Budget file

    c. Determine file size for direct access (D-A) files

    d. Compile COBOL program

    e. Run data set to create D-A files

2. FORTRAN program

    a. Create remaining two files needed for stored budgets

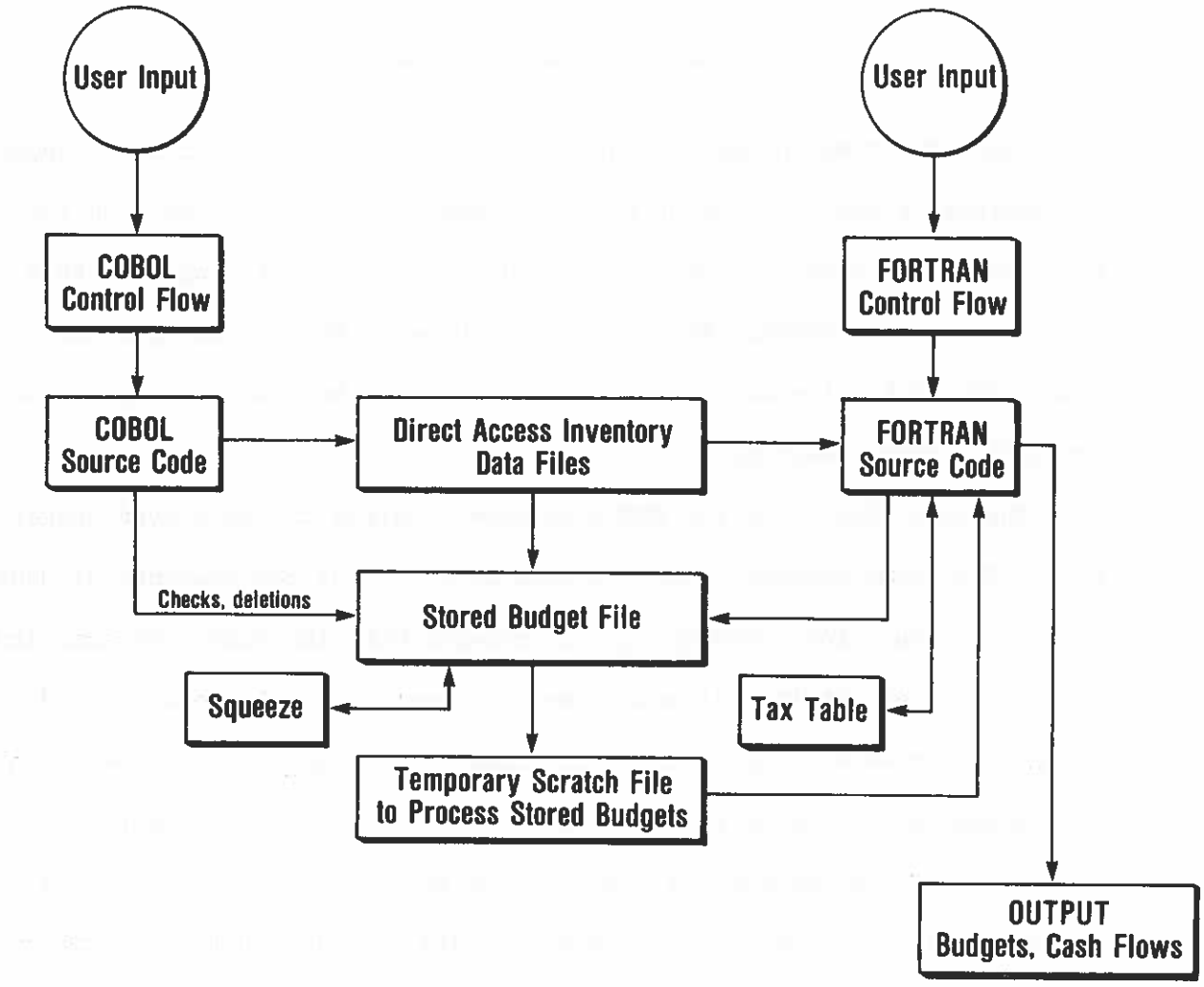
    b. Check file limits for previously created D-A files

    c. Compile FORTRAN program

    d. Create Tax Table

    e. Run data set

The files that need to be created using either the Texas A&M-provided code or the user's system utilities are discussed in order of installation.



Flow Diagram of Budget Simulation System

COBOL PROGRAM INSTALLATION

Since the COBOL program creates the D-A files, this procedure should be completed first. The COBOL program needs a scratch file to read the input data and, later, to process that data. In control language, this file is called DATASTRM. The file should have a LRECL of 169 and two tracks should be allocated for it. This needs to be created with a user-provided utility program.

The only other file the COBOL program requires is the stored budget file. The COBOL program cannot perform deletions or replacements without this file. The stored budget file is created with the Texas A&M-supplied utility program SBINIT. Although the user must decide how many records are needed in this file, a suggested figure is 10,000. This is based on the convenience of using stored budgets and the space requirements of approximately 100 records per budget. The iteration termination point (upper limit on the DO loop) in SBINIT should be adjusted to the number of records wanted.

The user next must decide how many items may eventually be used in each D-A file. If a D-A file must be expanded at a later date, the IBM type machine requires that all data be re-entered into the D-A file. This can be a cumbersome task, so users are advised to allocate sufficient D-A file space initially.

File size is included in the job control language and the source code for the COBOL. Both places have to indicate the selected D-A file

size. The second number in the space parameter card on the file DD on the job control cards for COBOL program execution specifies the number of records. (See Appendix A for examples of JCL used on Amdahl. For instance, in line 16 of the Aquaculture JCL, 500 records have been created in the Harvest file.)

Appendix B gives the COBOL internal references and the D-A file equivalent names for both the aquaculture and vessel simulation. These should be used to direct the program toward the data set name that the user has selected for each file. (For instance, in line 15 of the Aquaculture JCL, ABHARVST is the user D-A file name and HARVST after the // directs the program to that D-A file.)

Within the source code for each COBOL program is a section entitled "File Limits." The size of each file should be entered here, leaving one space, followed by a period, after VALUE. There are numbers in the source code at present, so the user merely has to change the existing numbers.

Once the D-A file sizes have been adjusted for specific needs, the COBOL program can be compiled in COBOLVS. The most efficient operation is achieved by compiling the program and storing it in a binary form rather than compiling with each execution.

The D-A files can now be created. It is preferable to create and list one file at a time. This avoids errors caused by the equipment being unable to allocate sufficient space at one time and narrows down the location of user input errors. If space allocation is done with the JCL when creating D-A files, it is necessary to change the DISP parameter on the DD card from OLD KEEP to NEW CATLG for the file being created

(see line 23 of the Aquaculture JCL in Appendix A as an example).

The data set provided by Texas A&M contains information to create all eight D-A files. If the D-A files are created one at a time, one data file must be divided into eight files (11 for vessels) and eight separate executions of the program. The separate data management manuals include directions for input data stream modification and creations. The control language directs the program toward the data input with the //CONTROL DD card. The Texas A&M-provided COBOL control flow (on the accompanying tape) for aquaculture is in Appendix C and for vessels in Appendix D. Output examples from running the data set provided are in Appendix E and F, respectively. The user's own system run should be checked against this to ensure correct operation of the BSS. Discrepancies should be reported to Texas A&M.

This completes the necessary steps to create the D-A files. Appendix A contains example JCL for the COBOL programs. Notice from the JCL the number of I/O units for the COBOL program output.

FORTRAN PROGRAM INSTALLATION

The FORTRAN program's file requirements include not only the D-A files created and maintained by the COBOL program, but also three additional stored budget files and a Tax Table file. Access to these files have to be provided to the FORTRAN program for its proper operation. The stored budget files have to be created before the FORTRAN program is executed, but the Tax Table can be created with the program.

The three stored budget files are the stored budget file itself, a squeeze file and a temporary storage file. The stored budget file was created previously with the SBINIT program before loading and executing the COBOL program. The squeeze file is one FORTRAN programs use to condense the stored budget file. Since budgets are of varying lengths, this is the only method available to the program to make space available for reuse after budgets have been deleted. The squeeze file has a record length of 84 and has to have the same number of records as the stored budget file. The temporary storage file is used when processing a stored budget. It has a record length of 80 and should contain as many records as in the longest stored budget (probably 200). The squeeze and temporary files need to be created with one of the user's machine-provided utility programs.

Before compiling the FORTRAN program, the file limits need to be checked to agree with those in the COBOL program. The FORTRAN program references these file limits in the job control cards and the define file

statement in the source code. The JCL reference is the second number in the space parameter. (For example, in line 53 of the Aquaculture JCL in Appendix G, the HARVEST file still has 500 records.) Within the source code, the DEFINE FILE statement is the first declarative statement in the main program. The number before the parenthesis indicates the I/O unit that is being used. (See Appendix B for conversion to file names. For example, the HARVST file's internal reference is 19.) The first number within the parenthesis is the file limit. This is the only number that the user should alter. There is one file limit per D-A file. Once the D-A file limit sizes are justified with those set in the COBOL program, the FORTRAN program can be compiled in FORTRAN H extended, optimization level 0. Again, operation is more efficient if the program is stored in binary.

The tax file can be created once the FORTRAN program is compiled. The JCL should be changed on the DISP parameter from OLD, KEEP to NEW, CATLG (see line 46, Appendix G, Aquaculture JCL). The instructions for using this option are found in the FORTRAN user manuals under the agenda heading "TXCR." Users also should run "TXWR" to check the file's creation.

Once the Tax Table file has been successfully created, the user can execute budget runs. The FORTRAN flow provided should be run through the program (accompanying tape and Appendices H and I for aquaculture and vessels, respectively). The output should be checked against the output provided in Appendix J for aquaculture and Appendix K for vessels. Any discrepancies should be reported to Texas A&M. The problem could be in the program itself or in the difference in compilers used.

Appendix G contains example JCL for the FORTRAN programs. Note the number of I/O devices necessary for output. The specific I/O unit reference must remain the same.

This completes installation of the Budget Simulation System. Users can now enter specific data into the inventory files and begin processing budgets.

APPENDIX A

Examples of JCL to execute the COBOL programs for both aquaculture and vessel simulation.

```
1.    //COBOL    JOB  (L679,4D,S08,010,WG), 'GRIFFIN'
2.    //JOBLIB DD   DSN=USR.L679.CA.JOBLIB,DISP=SHR
3.    //SEPT1 EXEC PGM=AQUACOBL,REGION=192K
4.    //SYSPRINT DD   DUMMY
5.    //SYSOUT  DD  SYSOUT=A
6.    //SYSDBOUT DD SYSOUT=A
7.    //SYSUDUMP DD SYSOUT=A
8.    //PRINTOUT DD SYSOUT=A
9.    //PRINTD   DD SYSOUT=A
10.   //CONTROL  DD DSN=WYL.JH.LS6.AQUACBFL,DISP=SHR
11.   //DATASTRM DD DSN=USR.L679.RK.DATASTRM,DISP=SHR
12.   //EQPSPL   DD DSN=USR.L679.CA.ABEQPSPL,SPACE=(56,500),
13.   //          DCB=(DSORG=DA,LRECL=56,RECFM=F),VOL=SER=USER47,
14.   //          UNIT=DISK,DISP=(OLD,KEEP)
15.   //HARVST   DD DSN=USR.L679.CA.ABHARVST,SPACE=(94,500),
16.   //          DCB=(DSORG=DA,LRECL=94,RECFM=F),VOL=SER=USER47,
17.   //          UNIT=DISK,DISP=(OLD,KEEP)
18.   //MACHIN   DD DSN=USR.L679.CA.ABMACHIN,SPACE=(84,500),
19.   //          DCB=(DSORG=DA,LRECL=84,RECFM=F),VOL=SER=USER4Q,
20.   //          UNIT=DISK,DISP=(OLD,KEEP)
21.   //OVERHD   DD DSN=USR.L679.CA.ABOVERHD,SPACE=(48,250),
22.   //          DCB=(DSORG=DA,LRECL=48,RECFM=F),VOL=SER=USER47
23.   //          UNIT=DISK,DISP=(OLD,KEEP)
24.   //PARMTR   DD DSN=USR.L679.CA.ABPARMTR,SPACE=(38,250),
25.   //          DCB=(DSORG=DA,LRECL=38,RECFM=F),VOL=SER=USER47
26.   //          UNIT=DISK,DISP=(OLD,KEEP)
27.   //POWERC   DD DSN=USR.L679.CA.ABPOWERC,SPACE=(52,250),
28.   //          DCB=(DSORG=DA,LRECL=52,RECFM=F),VOL=SER=USER47
29.   //          UNIT=DISK,DISP=(OLD,KEEP)
30.   //PRICEV   DD DSN=USR.L679.CA.ABPRICEV,SPACE=(46,1000),
31.   //          DCB=(DSORG=DA,LRECL=46,RECFM=F),VOL=SER=USER47
32.   //          UNIT=DISK,DISP=(OLD,KEEP)
33.   //PUMPCM   DD DSN=USR.L679.CA.ABPUMPCM,SPACE=(52,250),
34.   //          DCB=(DSORG=DA,LRECL=52,RECFM=F),VOL=SER=USER47,
35.   //          UNIT=DISK,DISP=(OLD,KEEP)
36.   //FT09F001 DD DSN=USR.L679.CA.ASTORBUD,DISP=(OLD,KEEP),
37.   //          SPACE=(84,1000),DCB=(DSORG=DA,LRECL=84,BLKSIZE=84,RECFM=F),
38.   //          VOL=SER=USER4E,UNIT=DISK
39.   //*END
```

```
1.      // COBOL  JOB (L679,4D,S08,010,WG),'GRIFFIN'
2.      //JOBLIB DD DSN=USR.L679.CA.JOBLIB,DISP=SHR
3.      //STEP1 EXEC PGM=VESSCOBL,REGION=192K
4.      //SYSPRINT DD DUMMY
5.      //SYSOUT  DD SYSOUT=A
6.      //SYSDBOUT DD SYSOUT=A
7.      //SYSUDUMP DD SYSOUT=A
8.      //PRINTOUT DD SYSOUT=A
9.      //PRINTD   DD SYSOUT=A
10.     //CONTROL  DD DSN=WYL.JH.LS6.AQUACBFL,DISP=SHR
11.     //DATASTRM DD DSN=USR.L679.RK.DATASTRM,DISP=SHR
12.     //CATCHF   DD DSN=USR.L679.LJ.VBCATCH,SPACE=(92,1200),
13.     //          DCB=(DSORG=DA,LRECL=92,RECFM=F),VOL=SER=USER47,
14.     //          UNIT=DISK,DISP=(OLD,KEEP)
15.     //CPRICE   DD   DSN=USR.L679.LJ.VBCPRICE,SPACE=(92,1200),
16.     //          DCB=(DSORG=DA,LRECL=92,RECFM=F),VOL=SER=USER47,
17.     //          UNIT=DISK,DISP=(OLD,KEEP)
18.     //EFFORT   DD   DSN=USR.L679.LJ.VBEFFORT,SPACE=(46,1200),
19.     //          DCB=(DSORG=DA,LRECL=46,RECFM=F),VOL=SER=USER47,
20.     //          UNIT=DISK,DISP=(OLD,KEEP)
21.     //ENGINE   DD   DSN=USR.L679.LJ.VBENGINE,SPACE=(104,100),
22.              DCB=(DSORG=DA,LRECL=104,RECFM=F),VOL=SER=USER46,
23.     //          UNIT=DISK,DISP=(OLD,KEEP)
24.     //EQPMNT   DD   DSN=USR.L679.LJ.VBEQUIPM,SPACE=(86,500),
25.     //          DCB=(DSORG=DA,LRECL=86,RECFM=F),VOL=SER=USER47
26.              UNIT=DISK,DISP=(OLD,KEEP)
27.     //GEARSF   DD   DSN=USR.L679.LJ.VBGEARS,SPACE=(86,500),
28.     //          DCB=(DSORG=DA,LRECL=86,RECFM=F),VOL=SER=USER46,
29.              UNIT=DISK,DISP=(OLD,KEEP)
30.     //HULLSF   DD   DSN=USR.L679.LJ.VBHULLS,SPACE=(102,100),
31.     //          DCB=(DSORG=DA,LRECL=102,RECFM=F),VOL=SER=USER47,
32.     //          UNIT=DISK,DISP=(OLD,KEEP)
33.     //PAYPAS   DD   DSN=USR.L679.LJ.VBPAYPS,SPACE=(92,1200),
34.     //          DCB=(DSORG=DA,LRECL=92,RECFM=F),VOL=SER=USER47,
35.     //          UNIT=DISK,DISP=(OLD,KEEP)
36.     //PCOSTS   DD   DSN=USR.L679.LJ.VBPCOST,SPACE=(52,25),
37.     //          DCB=(DSORG=DA,LRECL=52,RECFM=F),VOL=SER=USER47,
38.              UNIT=DISK,DISP=(OLD,KEEP)
39.     //RATESF   DD   DSN=USR.L679.LJ.VBRATES,SPACE=(52,200),
40.     //          DCB=(DSORG=DA,LRECL=52,RECFM=F),VOL=SER=USER47,
41.     //          UNIT=DISK,DISP=(OLD,KEEP)
42.     //STDBGT   DD   DSN=USR.L679.LJ.VSTORBUD,DISP=(OLD,KEEP),
43.     //          SPACE=(84,10000),DCB=(DSORG=DA,LRECL=84,BLKSIZE=84,RECFM=F),
44.     //          VOL=SER=USER47,UNIT=DISK
45.     //VCOSTS   DD   DSN=USR.L679.LJ.VBVCOST,SPACE=(62,200),
46.              DCB(DSORG=DA,LRECL=62,RECFM=F),VOL=SER=USER47,
47.     //          UNIT=DISK,DISP=(OLD,KEEP)
48.      //END
```

APPENDIX B

Internal references and file equivalent names for both aquaculture and vessel simulation.

AQUACULTURE

File Name	COBOL Internal Reference	FORTRAN Internal Reference	Record Length
Equipment & Supplies	EQPSPL	10	56
Harvest	HARVST	19	94
Machine	MACHIN	11	84
Overhead	OVERHO	12	48
Parameter	PARMTR	13	38
Power Unit	POWERC	14	52
Variable Prices	PRICEV	15	46
Pump	PUMPCM	16	52
Stored Budgets	FT09F001	19	84
Data Inputs	CONTROL	Go. Sysin	
Temporary Input Data	DATASTRM	None	169
Tax Table	None	08	13030
Squeeze	None	20	84
Temporary Budget	None	25	80

VESSELS

File Name	COBOL Internal Reference	FORTRAN Internal Reference	Record Length
Catch	CATCHF	10	92
Catch Prices	CPRICE	11	92
Effort	EFFORT	12	46
Engine	ENGINE	14	104
Equipment	EQPMNT	15	86
Gear	GEARSF	16	86
Hulls	HULLSF	17	102
Paying Passenger	PAYPAS	18	92
Periodic Cost	PCOSTS	19	52
Rates	RATESF	20	52
Variable Cost	VCOSTS	21	62
Stored Budgets	STOBGT	39	84
Data Input	CONTROL	Go. Sysin	
Temporary Input Data	DATASTRM	N/A	169
Tax Table	N/A	8	13030
Squeeze	N/A	37	84
Temporary Budget	N/A	25	80

APPENDIX C

COBOL control flow for aquaculture.

```
1.    DATE:  03 81
2.    ABS EQPSPL CRE
3.    *     1 ICE MACHINE                          1920  8 0.05 0.01 03 81 12     1
4.    **    2 MAGNETIC STIRRER/HEAT FISHER79        148  3 0.00 0.00 03 81 12     1
5.    **    3 AERATION BLOWER SPENCER TURBINE       602  5 0.00 0.01 03 81 12     1
6.    ABS EQPSPL LST
7.    ABS MACHIN CRE
8.    *     1 AUTOMOBILE/STATIONWAGON          11000 0.00 0.00 0.00 0.000000 0.0
9.          0  5      0 0.05 0.02 03 81 12     1
10.   ABS MACHIN LST
11.   ABS PUMPCM CRE
12.   *     1  1 EXTENDED SHAFT/AXIAL,2000GPM        2000    8500 03 81 12     1
13.   **    2  2 HYDRAFLO/2000GPM                    2000    9850 03 81 12
14.   ABS PUMPCM LST
15.   ABS POWERC CRE
16.   *     1  1 DIESEL/CATERP.200HP,4CYL,2STR        200    5000 03 81 12     1
17.   **    2  2 GASOLINE/DEERE,160HP,4CYL,4STR       160    2800 03 81 12     1
18.   ABS POWERC LST
19.   ABS PRICEV CRE
20.   *     1 LABOR/PART TIME/MONTH                700.00 03 81 12     1
21.   **    2 LAND TEXAS COAST                    1500.00 03 81 12     1
22.   **    3 BUILDING/SQ FT                        40.00 03 81 12     1
23.   **    4 FUEL UNLEADED/GAL.                     1.18 03 81 12     1
24.   **    5 BROODSTOCK RESTOCK 280/4 MO.          40.00 03 81 12     1
25.   **    6 SQUID FEED/LB                          0.75 03 81 12     1
26.   **    7 PETRI DISHES                         100.00 03 81 12     1
27.   **    8 OXYGEN REFILL/SHIPPING                 8.50 03 81 12     1
28.   ABS PRICEV LST
29.   ABS OVERHD CRE
30.   *     1 PERMIT FOR BUILDING                  1    148 03 81 12     1
31.   **    2 MANAGER'S MONTHLY SALARY            12   2000 03 81 12     1
32.   **    3 ASSNT MANAGER'S MONTHLY SALARY      12   1500 03 81 12     1
33.   ABS OVERHD LST
34.   ABS HARVST CRE
35.   *     1  1  3 PENAEUS NAUPLII (PRICE/1000)     03 81 12     1
36.    1.55  1.55  1.55  1.55  1.55  1.55  1.55  1.55  1.55  1.55  1.55  1.55
37.   ABS HARVST LST
38.   ABS PARMTR CRE
39.   *     1 HAZEN-WILLIAMS/CONCRETE PIPE          100.0000
40.   **    2 HAZEN-WILLIAMS/CLAY PIPE              140.0000
41.   **    3 HAZEN-WILLIAMS/STEEL PIPE             160.0000
42.   **    4 HAZEN-WILLIAMS/PVC PIPE               145.0000
43.   **    5 PUMP EFFICIENCY                        75.0000
44.   **    6 POWER UNIT EFFICIENCY                  30.0000
45.   **    7 POWER UNIT DRIVE EFF/DIRECT             1.0000
46.   **    8 POWER UNIT DRIVE EFF/RIGHT ANGLE        0.9700
47.   **    9 POWER UNIT DRIVE EFF/V-BELT             0.9500
48.   **   10 POWER UNIT DRIVE EFF/FLAT BELT          0.8000
49.   **   11 POWER UNIT DERATE/INTER. COMBUST        1.0000
50.   **   12 POWER UNIT DERATE/ELECTRIC              0.8000
51.   **   13 POWER UNIT DERATE/ACCESSORIES           0.0500
52.   **   14 POWER UNIT DERATE/RADIATOR              0.0500
53.   **   15 BTU/GALLON DIESEL                  138000.0000
54.   **   16 BTU/GALLON GASOLINE                150000.0000
55.   **   17 BTU/GALLON LP                      140000.0000
56.   **   18 PUMP DRIVER REPAIR/HOUR/$LIST-LP        0.0007
57.   **   19 PUMP DRIVER REPAIR/HOUR/$LIST-NG        0.0007
58.   **   20 PUMP DRIVER REPAIR/HOUR/$LIST-DS        0.0010
```

```
59.     **  21 PUMP DRIVER REPAIR/HOUR/$LIST-EL        0.0001
60.     **  22 DEFAULT HOURS OF LIFE /PUMP          30000.0000
61.     **  23 DEFAULT LIFE OF FACILITY STRUCT.        20.0000
62.     **  24 DEFAULT SHORT TERM INTEREST RATE         0.21
63.     **  25 DEFAULT INTER TERM INTEREST RATE         0.19
64.     **  26 DEFAULT LONG  TERM INTEREST RATE         0.17
65.     **  27 BUILDING INSURANCE RATE                  0.0450
66.     **  28 MACHINERY & EQUIPMENT INSUR RATE         0.0076
67.     **  29 WORKMAN'S COMPENSATION RATE 1            8.1700
68.     **  30 WORKMAN'S COMPENSATION RATE 2          100.0000
69.     **  31 EMPL. SOCL. SECRTY. RATE                 0.0665
70.     **  32 EMPL. SOCL. SECRTY. WAGE MAX.        29700.0000
71.     **  33 OWNER OPER. SOCL. SECRTY. RATE           0.0930
72.     **  34 OWNER OPER. SOCL. SECRTY. INC MA     29700.0000
73.     **  35 UNEMPLOYMENT TAX RATE                    0.0080
74.     **  36 UNEMPLOYMENT INCOME MAX               6000.0000
75.     **  37 PROPERTY TAX PERCENTAGE                  0.2000
76.     **  38 PROPERTY TAX DIVISOR                   100.0000
77.     **  39 PROPERTY TAX RATE                        2.44
78.     **  40 INV. TAX CRDT. RATE 3-5 YR. LIFE         0.0333
79.     **  41 INV. TAX CRDT. RATE 5-7 YR. LIFE         0.0666
80.     **  42 INV. TAX CRDT. RATE > 7 YR. LIFE         0.1000
81.     **  43 INV. TAX CRDT. LIMIT EXCSS. RATE         0.6000
82.     **  44 INV. TAX CRDT. DOLLAR LIMIT          25000.0000
83.     **  45 DEFAULT DISCOUNT RATE                    0.1700
84.     **  46 OPPORTUNITY COST % FOR EQUITY            0.1900
85.     **  47 OPPORTUNITY COST % FOR ENTREP         25000.0000
86.     **  48 STATE TAX PERCENTAGE RATE                0.0500
87.     ABS PARMTR LST
```

APPENDIX D

COBOL control flow for vessels.

```
DATE:  07 81
VBS EFFORT CRE
* 0001 SHRIMP                    01  60 114 162  42 14 07 81 12 9999
**0002 SHRIMP                    02  59 105 148  39 13 07 81 12 9999
**0003 SHRIMP                    03  59 105 148  39 13 07 81 12 9999
**0004 SHRIMP                    04  54 100 158  39 13 07 81 12 9999
**0005 SHRIMP                    05  64 126 194  48 16 07 81 12 9999
**0006 SHRIMP                    06 104 218 326  81 27 07 81 12 9999
**0007 SHRIMP                    07 122 249 301  84 28 07 81 12 9999
**0008 SHRIMP                    08  86 166 252  63 21 07 81 12 9999
**0009 SHRIMP                    09  89 174 241  63 21 07 81 12 9999
**0010 SHRIMP                    10  94 192 290  72 24 07 81 12 9999
**0011 SHRIMP                    11  71 139 198  51 17 07 81 12 9999
**0012 SHRIMP                    12  77 152 227  57 19 07 81 12 9999
**0013 HALF DAY CHARTER          01  45  15   0   0  1 07 81 12    0
**0014 HALF DAY CHARTER          02  45  15   0   0  1 07 81 12    0
**0015 HALF DAY CHARTER          03  60  20   0   0  1 07 81 12    0
**0016 HALF DAY CHARTER          04  60  20   0   0  1 07 81 12    0
**0017 HALF DAY CHARTER          05  75  25   0   0  1 07 81 12    0
**0018 HALF DAY CHARTER          06  90  30   0   0  1 07 81 12    0
**0019 HALF DAY CHARTER          07  90  30   0   0  1 07 81 12    0
**0020 HALF DAY CHARTER          08  75  25   0   0  1 07 81 12    0
**0021 HALF DAY CHARTER          09  60  20   0   0  1 07 81 12    0
**0022 HALF DAY CHARTER          10  60  20   0   0  1 07 81 12    0
**0023 HALF DAY CHARTER          11  60  20   0   0  1 07 81 12    0
**0024 HALF DAY CHARTER          12  30  10   0   0  1 07 81 12    0
VBS EFFORT LST
VBS CPRICE CRE
* 0001 SHRIMP                    01 5.00 4.73 3.58 2.50 1.28 5.00 4.73
 3.58  2.50  1.28  5.00  4.73  3.58  2.50 07 81 12 9999
**0002 SHRIMP                    02 4.62 4.35 3.21 2.00 1.70 4.62 4.35
 3.21  2.00  1.70  4.62  4.35  3.21  2.00 07 81 12 9999
**0003 SHRIMP                    03 4.67 4.50 3.35 2.40 2.06 4.67 4.50
 3.35  2.40  2.06  4.67  4.50  3.35  2.40 07 81 12 9999
**0004 SHRIMP                    04 4.25 3.80 3.22 2.46 1.79 4.25 3.80
 3.22  2.46  1.79  4.25  3.80  3.22  2.46 07 81 12 9999
**0005 SHRIMP                    05 4.30 3.90 3.22 2.30 1.67 4.30 3.90
 3.22  2.30  1.67  4.30  3.90  3.22  2.30 07 81 12 9999
**0006 SHRIMP                    06 4.55 4.20 3.43 2.20 1.34 4.55 4.20
 3.43  2.20  1.34  4.55  4.20  3.43  2.20 07 81 12 9999
**0007 SHRIMP                    07 4.40 4.20 3.36 2.29 1.84 4.40 4.20
 3.36  2.29  1.84  4.40  4.20  3.36  2.29 07 81 12 9999
**0008 SHRIMP                    08 4.88 4.00 3.27 2.50 1.84 4.88 4.00
 3.27  2.50  1.84  4.88  4.00  3.27  2.50 07 81 12 9999
**0009 SHRIMP                    09 4.30 3.75 2.85 2.45 1.69 4.30 3.75
 2.85  2.45  1.69  4.30  3.75  2.85  2.45 07 81 12 9999
**0010 SHRIMP                    10 4.10 3.65 3.05 2.55 1.55 4.10 3.65
 3.05  2.55  1.55  4.10  3.65  3.05  2.55 07 81 12 9999
**0011 SHRIMP                    11 3.82 3.45 2.70 2.30 1.46 3.82 3.45
 2.70  2.30  1.46  3.82  3.45  2.70  2.30 07 81 12 9999
**0012 SHRIMP                    12 3.80 3.40 2.60 2.10 1.46 3.80 3.40
 2.60  2.10  1.46  3.80  3.40  2.60  2.10 07 81 12 9999
VBS CPRICE LST
VBS CATCHF CRE
* 0001 SHRIMP                    01   51   53   61    6    4    2    2
    1    0    0    0    1    1    0 7   07 81 12 9999
**0002 SHRIMP                    02   47   45   35    2    2    1    1
    1    2    0    3    7   19    3 7   07 81 12 9999
```

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**0003 SHRIMP                                  03    54    61    29     3     2     3     5
     6     2     0     4     1     0     0 7     07 81 12 9999
**0004 SHRIMP                                  04    31    45    34     3     2     3     4
     4     1     0     1     5     7    10 7     07 81 12 9999
**0005 SHRIMP                                  05    33    52    49    16     4    14     6
     1     0     0     3     5     5     3 7     07 81 12 9999
**0006 SHRIMP                                  06    28    31   151   130    51     7     2
     0     0     0     0     0     0     0 7     07 81 12 9999
**0007 SHRIMP                                  07     7    46   218   161    31     1     0
     0     0     0     0     0     0     0 7     07 81 12 9999
**0008 SHRIMP                                  08    32    95   222    98    15    16     1
     1     0     0     0     0     0     0 7     07 81 12 9999
**0009 SHRIMP                                  09    78   131   149    26    10     1     2
     2     0     0     0     0     0     0 7     07 81 12 9999
**0010 SHRIMP                                  10   103    96   105     9     6     0     1
     0     0     0     1     1     1     0 7     07 81 12 9999
**0011 SHRIMP                                  11    73    62    94    11     5    10     8
    12     2     1     0     0     0     0 7     07 81 12 9999
**0012 SHRIMP                                  12    40    51    54     7     3     4     4
     4     1     0     0     0     0     0 7     07 81 12 9999
**0013 HALF DAY CHARTER                        01    10     3     0     0     0     0     0
     0     0     0     0     0     0     0 0     07 81 12     0
**0014 HALF DAY CHARTER                        02    10     3     2     0     0     0     0
     0     0     0     0     0     0     0 0     07 81 12     0
**0015 HALF DAY CHARTER                        03    10     5     5     0     0     0     0
     0     0     0     0     0     0     0 0     07 81 12     0
**0016 HALF DAY CHARTER                        04    10     5     5     0     0     0     0
     0     0     0     0     0     0     0 0     07 81 12     0
**0017 HALF DAY CHARTER                        05    20     5     0     0     0     0     0
     0     0     0     0     0     0     0 0     07 81 12     0
**0018 HALF DAY CHARTER                        06    15    10     5     0     0     0     0
     0     0     0     0     0     0     0 0     07 81 12     0
**0019 HALF DAY CHARTER                        07    15    10     5     0     0     0     0
     0     0     0     0     0     0     0 0     07 81 12     0
**0020 HALF DAY CHARTER                        08    15     5     5     0     0     0     0
     0     0     0     0     0     0     0 0     07 81 12     0
**0021 HALF DAY CHARTER                        09    10     5     5     0     0     0     0
     0     0     0     0     0     0     0 0     07 81 12     0
**0022 HALF DAY CHARTER                        10    10     5     5     0     0     0     0
     0     0     0     0     0     0     0 0     07 81 12     0
**0023 HALF DAY CHARTER                        11    10     5     5     0     0     0     0
     0     0     0     0     0     0     0 0     07 81 12     0
**0024 HALF DAY CHARTER                        12     5     3     2     0     0     0     0
     0     0     0     0     0     0     0 0     07 81 12     0
VBS CATCHF LST
VBS PAYPAS CRE
* 0001 HALF DAY CHARTER                        01   150   155   160     0     0     0     0
     0     0     0     0     0     0     0 0     07 81 12     0
**0002 HALF DAY CHARTER                        02   150   155   160     0     0     0     0
     0     0     0     0     0     0     0 0     07 81 12     0
**0003 HALF DAY CHARTER                        03   150   155   160     0     0     0     0
     0     0     0     0     0     0     0 0     07 81 12     0
**0004 HALF DAY CHARTER                        04   150   155   160     0     0     0     0
     0     0     0     0     0     0     0 0     07 81 12     0
**0005 HALF DAY CHARTER                        05   150   155   160     0     0     0     0
     0     0     0     0     0     0     0 0     07 81 12     0
**0006 HALF DAY CHARTER                        06   150   155   160     0     0     0     0
     0     0     0     0     0     0     0 0     07 81 12     0
**0007 HALF DAY CHARTER                        07   150   155   160     0     0     0     0
     0     0     0     0     0     0     0 0     07 81 12     0
**0008 HALF DAY CHARTER                        08   150   155   160     0     0     0     0
```

```
      0     0     0     0     0     0     0 07 81 12    0
**0009 HALF DAY CHARTER          09   150   155   160     0     0     0     0
      0     0     0     0     0     0     0 07 81 12    0
**0010 HALF DAY CHARTER          10   150   155   160     0     0     0     0
      0     0     0     0     0     0     0 07 81 12    0
**0011 HALF DAY CHARTER          11   150   155   160     0     0     0     0
      0     0     0     0     0     0     0 07 81 12    0
**0012 HALF DAY CHARTER          12   150   155   160     0     0     0     0
      0     0     0     0     0     0     0 07 81 12    0
VBS PAYPAS LST
VBS HULLSF CRE
* 0001 68' WOODEN GULF SHRIMP TRAWLER-12YRS OLD  BRMN                  60000.00 1
13 25  1.60 2600    0  0 07 81 12    0
**0002 65' STEEL GULF SHRIMP TRAWLER-3YRS OLD    ARAN                 275000.00 1
12 25  1.42 1500    0  0 07 81 12    0
VBS HULLSF LST
VBS GEARSF CRE
* 0001 MAIN CABLE 5/8" @ 72-FOOT 1200 FEET                             864.00 0
 1  0  0.00 07 81 12    2
**0002 TRY NET DOORS 15"X30"                                           125.00 0
 1  0  0.04 07 81 12    2
**0003 MAIN CABLE 900' @ 68-FOOT 9/16"                                 612.00 0
 1  0  0.00 07 81 12    2
**0004 65' FLAT NET                                                    700.00 0
 2  0  0.15 07 81 12    2
VBS GEARSF LST
VBS EQPMNT CRE
* 0001 WASH DOWN HOSE                                                   17.00 0
 4  0  0.00 07 81 12 9999
**0002 BRIGGS & STRATON GAS-WATER PUMP                                 180.00 1
10  0  0.01 07 81 12 9999
**0003 BLOCKS 12"                                                      250.00 0
 3  0  0.00 07 81 12 9999
**0004 SONAR W/RECORDER                                              10000.00 1
10  0  0.10 07 81 12 9999
VBS EQPMNT LST
VBS ENGINE CRE
* 0001 CAT 343 DIESEL 6:1 REDUCTION                                   20000.00 1
15 20  0.25 20.0 20.0  20.00  0 125 07 81 12 9999
**0002 PETTY AUX. ENGINE                                              2500.00 1
15 20  0.05  0.5  0.5   3.00  0 200 07 81 12 9999
VBS ENGINE LST
VBS RATESF CRE
* 0001 CREW SHARE OF CATCH                          15 07 81 12   10
**0002 CREW PERCENTAGE OF GROCERIES                 66 07 81 12   10
**0003 CREW SHARE OF FUEL                           0 07 81 12   10
**0004 CREW SHARE OF OIL AND LUBE                   0 07 81 12   10
**0005 CREW SHARE OF REPAIRS                        0 07 81 12   10
**0006 CREW SHARE OF REPLACEMENTS                   0 07 81 12   10
**0007 CREW SHARE OF ICE                            0 07 81 12   10
**0008 CAPTAINS SHARE OF CATCH                     20 07 81 12   10
**0009 CAPTAINS SHARE OF GROCERIES                 33 07 81 12   10
**0010 CAPTAINS SHARE OF FUEL                       0 07 81 12   10
**0011 CAPTAINS SHARE OF OIL AND LUBE               0 07 81 12   10
**0012 CAPTAINS SHARE OF REPAIRS                    0 07 81 12   10
**0013 CAPTAINS SHARE OF REPLACEMENTS               0 07 81 12   10
**0014 CAPTAINS SHARE OF ICE                        0 07 81 12   10
**0015 INTEREST RATE, LONG-TERM                    12 07 81 12   10
**0016 INTEREST RATE, MID-TERM                     15 07 81 12   10
**0017 INTEREST RATE, SHORT-TERM                   18 07 81 12   10
**0018 DISCOUNT RATE                               5 07 81 12   10
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181.     **0019 INSURANCE RATE, TOTAL VESSEL                    6 07 81 12    10
182.     **0020 INSURANCE RATE, HULL ONLY                       5 07 81 12    10
183.     **0021 INSURANCE RATE, CAPITAL INVESTMENT              6 07 81 12    10
184.     **0022 INSURANCE RATE, OPERATING INVESTMENT           10 07 81 12    10
185.     **0023 RATE FOR WORKMANS COMPENSATION                  8 07 81 12    10
186.     **0024 OPPORTUNITY COST OF EQUITY                     12 07 81 12    10
187.     **0025 OPPORTUNITY COST OF LABOR & MGT                10 07 81 12    10
188.     **0026 RISK PREMIUM                                   10 07 81 12    10
189.     **0027 RATE FOR SOC. SEC. CREW                         6 07 81 12    10
190.     **0028 UNEMPLOYMENT TAX RATE                           1 07 81 12    10
191.     **0029 PERCENTAGE VALUATION, PROPERTY TAX             80 07 81 12    10
192.     **0030 MIL RATE, PROPERTY TAX, IN MILS                12 07 81 12    10
193.     **0031 OWNER/OPERATOR SOC. SEC. RATE                   6 07 81 12    10
194.     **0032 INV. TAX CREDIT RATE 3-5 LIFE                   3 07 81 12    10
195.     **0033 INV. TAX CREDIT RATE, 5-7 YR LIFE               7 07 81 12    10
196.     **0034 INV. TAX CREDIT RATE, >7 YR LIFE               10 07 81 12    10
197.     **0035 INV. TAX CREDIT LIMIT EXCESS RATE              60 07 81 12    10
198.     **0036 STATE INCOME TAX PERCENTAGE OF FEDERAL         10 07 81 12    10
199.     VBS RATESF LST
200.     VBS VCOSTS CRE
201.     * 0001 ICE PER POUND                                          0.02 07 81 12    0
202.     **0002 DIESEL PER GALLON                                      0.90 07 81 12    0
203.     **0003 GROCERIES PER PERSON, ONE DAY TRIP                     6.00 07 81 12    0
204.     **0004 MAX INCOME EMPLOYEE SOC SEC TAX                    29000.00 07 81 12    0
205.     **0005 MAX INCOME EMPLOYEE UNEMPLOYMENT TAX                6000.00 07 81 12    0
206.     **0006 MAX INCOME EMPLOYER SOC SEC TAX                    29000.00 07 81 12    0
207.     **0007 OPPORTUNITL COST FOR MANAGEMENT                    26000.00 07 81 12    0
208.     **0008 INSURANCE FEES FOR CREW AND HULL                    6700.00 07 81 12    0
209.     **0009 GROCERIES PER PERSON, ONE DAY TRIP                     6.00 07 81 12    0
210.     **0010 BAR OF ICE (300 LB)                                    4.00 07 81 12    0
211.     **0011 CREW'S EXPENSE FOR FREEZER OPERATION PER DAY          12.50 07 81 12    0
212.     **0012 CREW'S EXPENSE FOR NET REPAIR PER LB                   0.02 07 81 12    0
213.     **0013 BAY DIESEL PER GALLON                                  0.99 07 81 12    0
214.     **0014 BAY ICE PER LB.                                        0.01 07 81 12    0
215.     VBS VCOSTS LST
216.     VBS PCOSTS CRE
217.     * 0001 STEEL HAUL-OUT                    0 24   1 07 81 12    0
218.     **0002 WOODEN HAUL-OUT                   6 12   1 07 81 12    0
219.     VBS PCOSTS LST
```

APPENDIX E

Examples of direct-access files created by the COBOL program for aquaculture.

AQUACULTURE BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-M01-133
CURRENT STATUS OF - EQUIPMENT AND SUPPLIES FILE

ROW NBR	ITEM DESCRIPTION	INITIAL PRICE	YEARS OWNED	SALVAGE PERCENT	REPAIR PERCENT	UPDATE INFORMATION		
1	ICE MACHINE	1920	8	0.05	0.01	3/81	12	1
2	MAGNETIC STIRRER/HEAT FISHER79	148	3	0.00	0.00	3/81	12	1
3	AERATION BLOWER SPENCER TURBINE	602	5	0.00	0.01	3/81	12	1

SUMMARY: MAXIMUM FILE SIZE = 500
NUMBER OF RECORDS IN FILE = 3

AQUACULTURE BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-M01-133
CURRENT STATUS OF - HARVEST PRICES FILE

ROW NBR		ITEM DESCRIPTION	MONTHLY PRICES JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	UPDATE INFORMATION		
1	1 3	PENAEUS NAUPLII (PRICE/1000)	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	3/81	12	1

SUMMARY: MAXIMUM FILE SIZE = 500
NUMBER OF RECORDS IN FILE = 1

AQUACULTURE BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-MO1-133
CURRENT STATUS OF - MACHINERY FILE

ROW NBR	ITEM DESCRIPTION	INITIAL PRICE	FUEL MULT	LUBE MULT	REP1	REP2	REP3	ANNUAL HOURS	LI FE	HRS IN LIFE	REP %	SAL %	UPDATE INFORMATION		
1	AUTOMOBILE/STATIONWAGON	11000	0.00	0.00	0.00	0.000000	0.0	0	5	0	0.05	0.02	3/81	12	1

SUMMARY: MAXIMUM FILE SIZE = 500
NUMBER OF RECORDS IN FILE = 1

AQUACULTURE BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-MO1-133
CURRENT STATUS OF - OVERHEAD FILE

ROW NBR	ITEM DESCRIPTION	FREQ	VALUE	UPDATE INFORMATION		
1	PERMIT FOR BUILDING	1	148	3/81	12	1
2	MANAGER'S MONTHLY SALARY	12	2000	3/81	12	1
3	ASSNT MANAGER'S MONTHLY SALARY	12	1500	3/81	12	1

SUMMARY: MAXIMUM FILE SIZE = 250
NUMBER OF RECORDS IN FILE = 3

AQUACULTURE BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-MO1-133
CURRENT STATUS OF - PARAMATER FILE

ROW NBR	ITEM DESCRIPTION	VALUE
1	HAZEN-WILLIAMS/CONCRETE PIPE	100.0000
2	HAZEN-WILLIAMS/CLAY PIPE	140.0000
3	HAZEN-WILLIAMS/STEEL PIPE	160.0000
4	HAZEN-WILLIAMS/PVC PIPE	145.0000
5	PUMP EFFICIENCY	75.0000
6	POWER UNIT EFFICIENCY	30.0000
7	POWER UNIT DRIVE EFF/DIRECT	1.0000
8	POWER UNIT DRIVE EFF/RIGHT ANGLE	0.9700
9	POWER UNIT DRIVE EFF/V-BELT	0.9500
10	POWER UNIT DRIVE EFF/FLAT BELT	0.8000
11	POWER UNIT DERATE/INTER. COMBUST	1.0000
12	POWER UNIT DERATE/ELECTRIC	0.8000
13	POWER UNIT DERATE/ACCESSORIES	0.0500
14	POWER UNIT DERATE/RADIATOR	0.0500
15	BTU/GALLON DIESEL	138000.0000
16	BTU/GALLON GASOLINE	150000.0000
17	BTU/GALLON LP	140000.0000
18	PUMP DRIVER REPAIR/HOUR/$LIST-LP	0.0007
19	PUMP DRIVER REPAIR/HOUR/$LIST-NG	0.0007
20	PUMP DRIVER REPAIR/HOUR/$LIST-DS	0.0010
21	PUMP DRIVER REPAIR/HOUR/$LIST-EL	0.0001
22	DEFAULT HOURS OF LIFE /PUMP	30000.0000
23	DEFAULT LIFE OF FACILITY STRUCT.	20.0000
24	DEFAULT SHORT TERM INTEREST RATE	0.2100
25	DEFAULT INTER TERM INTEREST RATE	0.1900
26	DEFAULT LONG TERM INTEREST RATE	0.1700
27	BUILDING INSURANCE RATE	0.0450
28	MACHINERY & EQUIPMENT INSUR RATE	0.0076
29	WORKMAN'S COMPENSATION RATE 1	8.1700
30	WORKMAN'S COMPENSATION RATE 2	100.0000
31	EMPL. SOCL. SECRTY. RATE	0.0665
32	EMPL. SOCL. SECRTY. WAGE MAX.	29700.0000
33	OWNER OPER. SOCL. SECRTY. RATE	0.0930
34	OWNER OPER. SOCL. SECRTY. INC MA	29700.0000
35	UNEMPLOYMENT TAX RATE	0.0080
36	UNEMPLOYMENT INCOME MAX	6000.0000
37	PROPERTY TAX PERCENTAGE	0.2000
38	PROPERTY TAX DIVISOR	100.0000
39	PROPERTY TAX RATE	2.4400
40	INV. TAX CRDT. RATE 3-5 YR. LIFE	0.0333
41	INV. TAX CRDT. RATE 5-7 YR. LIFE	0.0666
42	INV. TAX CRDT. RATE > 7 YR. LIFE	0.1000
43	INV. TAX CRDT. LIMIT EXCSS. RATE	0.6000
44	INV. TAX CRDT. DOLLAR LIMIT	25000.0000
45	DEFAULT DISCOUNT RATE	0.1700
46	OPPORTUNITY COST % FOR EQUITY	0.1900
47	OPPORTUNITY COST FOR ENTREP	25000.0000

--------CONTINUED--------

AQUACULTURE BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-M01-133
CURRENT STATUS OF - PARAMATER FILE

ROW NBR	ITEM DESCRIPTION	VALUE
48	STATE TAX PERCENTAGE RATE	0.0500

SUMMARY: MAXIMUM FILE SIZE = 250
NUMBER OF RECORDS IN FILE = 48

AQUACULTURE BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-M01-133
CURRENT STATUS OF - POWER UNIT FILE

ROW NBR		ITEM DESCRIPTION	HP	INITIAL PRICE	UPDATE INFORMATION		
1	1	DIESEL/CATERP.200HP,4CYL,2STR	200	5000	3/81	12	1
2	2	GASOLINE/DEERE,160HP,4CYL,4STR	160	2800	3/81	12	1

SUMMARY: MAXIMUM FILE SIZE = 250
NUMBER OF RECORDS IN FILE = 2

AQUACULTURE BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-M01-133
CURRENT STATUS OF - PRICE FILE

ROW NBR	ITEM DESCRIPTION	UNIT PRICE	UPDATE INFORMATION		
1	LABOR/PART TIME/MONTH	700.00	3/81	12	1
2	LAND TEXAS COAST	1500.00	3/81	12	1
3	BUILDING/SQ FT	40.00	3/81	12	1
4	FUEL UNLEADED/GAL.	1.18	3/81	12	1
5	BROODSTOCK RESTOCK 280/4 MO.	40.00	3/81	12	1
6	SQUID FEED/LB	0.75	3/81	12	1
7	PETRI DISHES	100.00	3/81	12	1
8	OXYGEN REFILL/SHIPPING	8.50	3/81	12	1

SUMMARY: MAXIMUM FILE SIZE = 1000
NUMBER OF RECORDS IN FILE = 8

AQUACULTURE BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-M01-133
CURRENT STATUS OF - PUMP UNIT FILE

ROW NBR		ITEM DESCRIPTION	GALS/ MIN	INITIAL PRICE	UPDATE INFORMATION		
1	1	EXTENDED SHAFT/AXIAL,2000GPM	2000	8500	3/81	12	1
2	2	HYDRAFLO/2000GPM	2000	9850	3/81	12	0

SUMMARY: MAXIMUM FILE SIZE = 250
NUMBER OF RECORDS IN FILE = 2

APPENDIX F

Examples of direct-access files created by the COBOL program for vessels.

VESSEL BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-MO1-133
CURRENT STATUS OF - CATCH FILE

ROW NBR	FISHERY DESCRIPTION	ICE COEF	MO	SIZE 1	SIZE 2	SIZE 3	SIZE 4	SIZE 5	SIZE 6	SIZE 7	SIZE 8	SIZE 9	SIZE 10	SIZE 11	SIZE 12	SIZE 13	SIZE 14	UPDATE INFORMATION
1	PORT 5 VES. 21	7.00	1	51	53	61	6	4	2	2	1	0	0	0	1	1	0	7/81 12 9999
2	PORT 5 VES. 21	7.00	2	47	45	35	2	2	1	1	1	2	0	3	7	19	3	7/81 12 9999
3	PORT 5 VES. 21	7.00	3	54	61	29	3	2	3	5	6	2	0	4	1	0	0	7/81 12 9999
4	PORT 5 VES. 21	7.00	4	31	45	34	3	2	3	4	4	1	0	1	5	7	10	7/81 12 9999
5	PORT 5 VES. 21	7.00	5	33	52	49	16	4	14	6	1	0	0	3	5	5	3	7/81 12 9999
6	PORT 5 VES. 21	7.00	6	28	31	151	130	51	7	2	0	0	0	0	0	0	0	7/81 12 9999
7	PORT 5 VES. 21	7.00	7	7	46	218	161	31	1	0	0	0	0	0	0	0	0	7/81 12 9999
8	PORT 5 VES. 21	7.00	8	32	95	222	98	15	16	1	1	0	0	0	0	0	0	7/81 12 9999
9	PORT 5 VES. 21	7.00	9	78	131	149	26	10	1	2	2	0	0	0	0	0	0	7/81 12 9999
10	PORT 5 VES. 21	7.00	10	103	96	105	9	6	0	1	0	0	0	1	1	1	0	7/81 12 9999
11	PORT 5 VES. 21	7.00	11	73	62	94	11	5	10	8	12	2	1	0	0	0	0	7/81 12 9999
12	PORT 5 VES. 21	7.00	12	40	51	54	7	3	4	4	4	1	0	0	0	0	0	7/81 12 9999
13	HALF DAY CHARTER	0.00	1	10	3	0	0	0	0	0	0	0	0	0	0	0	0	7/81 12 0
14	HALF DAY CHARTER	0.00	2	10	3	2	0	0	0	0	0	0	0	0	0	0	0	7/81 12 0
15	HALF DAY CHARTER	0.00	3	10	5	5	0	0	0	0	0	0	0	0	0	0	0	7/81 12 0
16	HALF DAY CHARTER	0.00	4	10	5	5	0	0	0	0	0	0	0	0	0	0	0	7/81 12 0
17	HALF DAY CHARTER	0.00	5	20	5	0	0	0	0	0	0	0	0	0	0	0	0	7/81 12 0
18	HALF DAY CHARTER	0.00	6	15	10	5	0	0	0	0	0	0	0	0	0	0	0	7/81 12 0
19	HALF DAY CHARTER	0.00	7	15	10	5	0	0	0	0	0	0	0	0	0	0	0	7/81 12 0
20	HALF DAY CHARTER	0.00	8	15	5	5	0	0	0	0	0	0	0	0	0	0	0	7/81 12 0
21	HALF DAY CHARTER	0.00	9	10	5	5	0	0	0	0	0	0	0	0	0	0	0	7/81 12 0
22	HALF DAY CHARTER	0.00	10	10	5	5	0	0	0	0	0	0	0	0	0	0	0	7/81 12 0
23	HALF DAY CHARTER	0.00	11	10	5	5	0	0	0	0	0	0	0	0	0	0	0	7/81 12 0
24	HALF DAY CHARTER	0.00	12	5	3	2	0	0	0	0	0	0	0	0	0	0	0	7/81 12 0

SUMMARY: MAXIMUM FILE SIZE = 1200
NUMBER OF RECORDS IN FILE = 24

VESSEL BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-M01-133
CURRENT STATUS OF - CATCH PRICES FILE

ROW NBR	FISHERY DESCRIPTION	MO	SIZE 1	SIZE 2	SIZE 3	SIZE 4	SIZE 5	SIZE 6	SIZE 7	SIZE 8	SIZE 9	SIZE 10	SIZE 11	SIZE 12	SIZE 13	SIZE 14	UPDATE INFORMATION
1	SHRIMP	000 1	5.00	4.73	3.58	2.50	1.28	5.00	4.73	3.58	2.50	1.28	5.00	4.73	3.58	2.50	7/81 12 9999
2	SHRIMP	2	4.62	4.35	3.21	2.00	1.70	4.62	4.35	3.21	2.00	1.70	4.62	4.35	3.21	2.00	7/81 12 9999
3	SHRIMP	3	4.67	4.50	3.35	2.40	2.06	4.67	4.50	3.35	2.40	2.06	4.67	4.50	3.35	2.40	7/81 12 9999
4	SHRIMP	4	4.25	3.80	3.22	2.46	1.79	4.25	3.80	3.22	2.46	1.79	4.25	3.80	3.22	2.46	7/81 12 9999
5	SHRIMP	5	4.30	3.90	3.22	2.30	1.67	4.30	3.90	3.22	2.30	1.67	4.30	3.90	3.22	2.30	7/81 12 9999
6	SHRIMP	6	4.55	4.20	3.43	2.20	1.34	4.55	4.20	3.43	2.20	1.34	4.55	4.20	3.43	2.20	7/81 12 9999
7	SHRIMP	7	4.40	4.20	3.36	2.29	1.84	4.40	4.20	3.36	2.29	1.84	4.40	4.20	3.36	2.29	7/81 12 9999
8	SHRIMP	8	4.88	4.00	3.27	2.50	1.84	4.88	4.00	3.27	2.50	1.84	4.88	4.00	3.27	2.50	7/81 12 9999
9	SHRIMP	9	4.30	3.75	2.85	2.45	1.69	4.30	3.75	2.85	2.45	1.69	4.30	3.75	2.85	2.45	7/81 12 9999
10	SHRIMP	10	4.10	3.65	3.05	2.55	1.55	4.10	3.65	3.05	2.55	1.55	4.10	3.65	3.05	2.55	7/81 12 9999
11	SHRIMP	11	3.82	3.45	2.70	2.30	1.46	3.82	3.45	2.70	2.30	1.46	3.82	3.45	2.70	2.30	7/81 12 9999
12	SHRIMP	12	3.80	3.40	2.60	2.10	1.46	3.80	3.40	2.60	2.10	1.46	3.80	3.40	2.60	2.10	7/81 12 9999

SUMMARY:
MAXIMUM FILE SIZE = 1200
NUMBER OF RECORDS IN FILE = 12

VESSEL BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-MO1-133
CURRENT STATUS OF - FISHING EFFORT FILE

ROW NBR	FISHERY DESCRIPTION	MO	NO LOAD	WITH LOAD	ENG OFF	AUX ENG	DAYS FISHED	UPDATE INFORMATION
1	PORT 5 VES. 21	1	60	114	162	42	14	7/81 12 9999
2	PORT 5 VES. 21	2	59	105	148	39	13	7/81 12 9999
3	PORT 5 VES. 21	3	59	105	148	39	13	7/81 12 9999
4	PORT 5 VES. 21	4	54	100	158	39	13	7/81 12 9999
5	PORT 5 VES. 21	5	64	126	194	48	16	7/81 12 9999
6	PORT 5 VES. 21	6	104	218	326	81	27	7/81 12 9999
7	PORT 5 VES. 21	7	122	249	301	84	28	7/81 12 9999
8	PORT 5 VES. 21	8	86	166	252	63	21	7/81 12 9999
9	PORT 5 VES. 21	9	89	174	241	63	21	7/81 12 9999
10	PORT 5 VES. 21	10	94	192	290	72	24	7/81 12 9999
11	PORT 5 VES. 21	11	71	139	198	51	17	7/81 12 9999
12	PORT 5 VES. 21	12	77	152	227	57	19	7/81 12 9999
13	HALF DAY CHARTER	1	45	15	0	0	1	7/81 12 0
14	HALF DAY CHARTER	2	45	15	0	0	1	7/81 12 0
15	HALF DAY CHARTER	3	60	20	0	0	1	7/81 12 0
16	HALF DAY CHARTER	4	60	20	0	0	1	7/81 12 0
17	HALF DAY CHARTER	5	75	25	0	0	1	7/81 12 0
18	HALF DAY CHARTER	6	90	30	0	0	1	7/81 12 0
19	HALF DAY CHARTER	7	90	30	0	0	1	7/81 12 0
20	HALF DAY CHARTER	8	75	25	0	0	1	7/81 12 0
21	HALF DAY CHARTER	9	60	20	0	0	1	7/81 12 0
22	HALF DAY CHARTER	10	60	20	0	0	1	7/81 12 0
23	HALF DAY CHARTER	11	60	20	0	0	1	7/81 12 0
24	HALF DAY CHARTER	12	30	10	0	0	1	7/81 12 0

SUMMARY: MAXIMUM FILE SIZE = 1200
NUMBER OF RECORDS IN FILE = 24

VESSEL BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-M01-133
CURRENT STATUS OF - ENGINES FILE

ROW NBR	ENGINE DESCRIPTION	MARKET PRICE	CAP CODE	LI FE	SALV %	REP CST	GALS LOAD	GALS EMTY	OIL & LUBE	OIL %	HRS CHK	UPDATE INFORMATION
1	CAT 343 DIESEL 6:1 REDUCTION	20000.00	1	15	20	0.25	20.0	20.0	20.00	0	125	7/81 12 9999
2	PETTY AUX. ENGINE	2500.00	1	15	20	0.05	0.5	0.5	3.00	0	200	7/81 12 9999

SUMMARY: MAXIMUM FILE SIZE = 100
NUMBER OF RECORDS IN FILE = 2

VESSEL BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-M01-133
CURRENT STATUS OF - EQUIPMENT FILE

ROW NBR	EQUIPMENT DESCRIPTION	MARKET PRICE	CAP CODE	LI FE	SALV %	REP CST	UPDATE INFORMATION
1	WASH DOWN HOSE	17.00	0	4	0	0.00	7/81 12 9999
2	BRIGGS & STRATON GAS-WATER PUMP	180.00	1	10	0	0.01	7/81 12 9999
3	BLOCKS 12"	250.00	0	3	0	0.00	7/81 12 9999
4	SONAR W/RECORDER	10000.00	1	10	0	0.10	7/81 12 9999

SUMMARY: MAXIMUM FILE SIZE = 500
NUMBER OF RECORDS IN FILE = 4

VESSEL BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-M01-133
CURRENT STATUS OF - GEARS FILE

ROW NBR	GEAR DESCRIPTION	MARKET PRICE	CAP CODE	LI FE	SALV %	REP CST	UPDATE INFORMATION	
1	MAIN CABLE 5/8" @ 72-FOOT 1200 FEET	864.00	0	1	0	0.00	7/81 12	2
2	TRY NET DOORS 15"X30"	125.00	0	1	0	0.04	7/81 12	2
3	MAIN CABLE 900' @ 68-FOOT 9/16"	612.00	0	1	0	0.00	7/81 12	2

SUMMARY: MAXIMUM FILE SIZE = 500
NUMBER OF RECORDS IN FILE = 3

VESSEL BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-M01-133
CURRENT STATUS OF - HULLS FILE

ROW NBR	HULLS DESCRIPTION		MARKET PRICE	CAP CODE	LI FE	SALV %	REP CST	HAUL-OUT	MATERIAL ONLY	H-O %	UPDATE INFORMATION	
1	68' WOODEN GULF SHRIMP TRAWLER-12YRS OLD	BRMN	60000.00	1	13	25	1.60	2600.00	0.00	0	7/81 12	0
2	65' STEEL GULF SHRIMP TRAWLER-3YRS OLD	ARAN	275000.00	1	12	25	1.42	1500.00	0.00	0	7/81 12	0

SUMMARY: MAXIMUM FILE SIZE = 100
NUMBER OF RECORDS IN FILE = 2

VESSEL BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-M01-133
CURRENT STATUS OF - PAYING PASSENGERS FILE

ROW NBR	FISHERY DESCRIPTION	MO	FARE 1	FARE 2	FARE 3	FARE 4	FARE 5	FARE 6	FARE 7	FARE 8	FARE 9	FARE 10	FARE 11	FARE 12	FARE 13	FARE 14	UPDATE INFORMATION	
1	HALF DAY CHARTER	1	150	155	160	0	0	0	0	0	0	0	0	0	0	0	7/81 12	0
2	HALF DAY CHARTER	2	150	155	160	0	0	0	0	0	0	0	0	0	0	0	7/81 12	0
3	HALF DAY CHARTER	3	150	155	160	0	0	0	0	0	0	0	0	0	0	0	7/81 12	0
4	HALF DAY CHARTER	4	150	155	160	0	0	0	0	0	0	0	0	0	0	0	7/81 12	0
5	HALF DAY CHARTER	5	150	155	160	0	0	0	0	0	0	0	0	0	0	0	7/81 12	0
6	HALF DAY CHARTER	6	150	155	160	0	0	0	0	0	0	0	0	0	0	0	7/81 12	0
7	HALF DAY CHARTER	7	150	155	160	0	0	0	0	0	0	0	0	0	0	0	7/81 12	0
8	HALF DAY CHARTER	8	150	155	160	0	0	0	0	0	0	0	0	0	0	0	7/81 12	0
9	HALF DAY CHARTER	9	150	155	160	0	0	0	0	0	0	0	0	0	0	0	7/81 12	0
10	HALF DAY CHARTER	10	150	155	160	0	0	0	0	0	0	0	0	0	0	0	7/81 12	0
11	HALF DAY CHARTER	11	150	155	160	0	0	0	0	0	0	0	0	0	0	0	7/81 12	0
12	HALF DAY CHARTER	12	150	155	160	0	0	0	0	0	0	0	0	0	0	0	7/81 12	0
14	HALF DAY CHARTER	2	150	155	160	0	0	0	0	0	0	0	0	0	0	0	7/81 12	0
15	HALF DAY CHARTER	3	150	155	160	0	0	0	0	0	0	0	0	0	0	0	7/81 12	0
16	HALF DAY CHARTER	4	150	155	160	0	0	0	0	0	0	0	0	0	0	0	7/81 12	0
17	HALF DAY CHARTER	5	150	155	160	0	0	0	0	0	0	0	0	0	0	0	7/81 12	0
18	HALF DAY CHARTER	6	150	155	160	0	0	0	0	0	0	0	0	0	0	0	7/81 12	0
19	HALF DAY CHARTER	7	150	155	160	0	0	0	0	0	0	0	0	0	0	0	7/81 12	0
20	HALF DAY CHARTER	8	150	155	160	0	0	0	0	0	0	0	0	0	0	0	7/81 12	0
21	HALF DAY CHARTER	9	150	155	160	0	0	0	0	0	0	0	0	0	0	0	7/81 12	0
22	HALF DAY CHARTER	10	150	155	160	0	0	0	0	0	0	0	0	0	0	0	7/81 12	0
23	HALF DAY CHARTER	11	150	155	160	0	0	0	0	0	0	0	0	0	0	0	7/81 12	0
24	HALF DAY CHARTER	12	150	155	160	0	0	0	0	0	0	0	0	0	0	0	7/81 12	0

SUMMARY: MAXIMUM FILE SIZE = 1200
NUMBER OF RECORDS IN FILE = 23

VESSEL BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-MO1-133
CURRENT STATUS OF - RATES FILE

ROW NBR	RATES DESCRIPTION	RATE VALUE	UPDATE INFORMATION		
1	CREW SHARE OF CATCH	15	7/81	12	10
2	CREW PERCENTAGE OF GROCERIES	66	7/81	12	10
3	CREW SHARE OF FUEL	0	7/81	12	10
4	CREW SHARE OF OIL AND LUBE	0	7/81	12	10
5	CREW SHARE OF REPAIRS	0	7/81	12	10
6	CREW SHARE OF REPLACEMENTS	0	7/81	12	10
7	CREW SHARE OF ICE	0	7/81	12	10
8	CAPTAINS SHARE OF CATCH	20	7/81	12	10
9	CAPTAINS SHARE OF GROCERIES	33	7/81	12	10
10	CAPTAINS SHARE OF FUEL	0	7/81	12	10
11	CAPTAINS SHARE OF OIL AND LUBE	0	7/81	12	10
12	CAPTAINS SHARE OF REPAIRS	0	7/81	12	10
13	CAPTAINS SHARE OF REPLACEMENTS	0	7/81	12	10
14	CAPTAINS SHARE OF ICE	0	7/81	12	10
15	INTEREST RATE, LONG-TERM	12	7/81	12	10
16	INTEREST RATE, MID-TERM	15	7/81	12	10
17	INTEREST RATE, SHORT-TERM	18	7/81	12	10
18	DISCOUNT RATE	5	7/81	12	10
19	INSURANCE RATE, TOTAL VESSEL	6	7/81	12	10
20	INSURANCE RATE, HULL ONLY	5	7/81	12	10
21	INSURANCE RATE, CAPITAL INVESTMENT	6	7/81	12	10
22	INSURANCE RATE, OPERATING INVESTMENT	10	7/81	12	10
23	RATE FOR WORKMANS COMPENSATION	8	7/81	12	10
24	OPPORTUNITY COST OF EQUITY	12	7/81	12	10
25	OPPORTUNITY COST OF LABOR & MGT	10	7/81	12	10
26	RISK PREMIUM	10	7/81	12	10
27	RATE FOR SOC. SEC. CREW	6	7/81	12	10
28	UNEMPLOYMENT TAX RATE	1	7/81	12	10
29	PERCENTAGE VALUATION, PROPERTY TAX	80	7/81	12	10
30	MIL RATE, PROPERTY TAX, IN MILS	12	7/81	12	10
31	OWNER/OPERATOR SOC. SEC. RATE	6	7/81	12	10
32	INV. TAX CREDIT RATE 3-5 LIFE	3	7/81	12	10
33	INV. TAX CREDIT RATE, 5-7 YR LIFE	7	7/81	12	10
34	INV. TAX CREDIT RATE, >7 YR LIFE	10	7/81	12	10
35	INV. TAX CREDIT LIMIT EXCESS RATE	60	7/81	12	10
36	STATE INCOME TAX PERCENTAGE OF FEDERAL	10	7/81	12	10

SUMMARY: MAXIMUM FILE SIZE = 200
NUMBER OF RECORDS IN FILE = 36

VESSEL BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-MO1-133
CURRENT STATUS OF - PERIODIC COSTS FILE

ROW NBR	ITEM DESCRIPTION	1ST TIME	MONTHS UNTIL	TIMES/ YEAR	UPDATE INFORMATION	
1	STEEL HAUL-OUT	0	24	1	7/81 12	0
2	WOODEN HAUL-OUT	6	12	1	7/81 12	0

SUMMARY: MAXIMUM FILE SIZE = 25
NUMBER OF RECORDS IN FILE = 2

VESSEL BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-MO1-133
CURRENT STATUS OF - FIXED AND VARIABLE COSTS FILE

ROW NBR	FIXED AND VARIABLE COST ITEMS DESCRIPTION		COST/ UNIT	UPDATE INFORMATION	
1	ICE PER POUND		0.02	7/81 12	0
2	DIESEL PER GALLON		0.90	7/81 12	0
3	GROCERIES PER PERSON, ONE DAY TRIP		6.00	7/81 12	0
4	MAX INCOME EMPLOYEE SOC SEC TAX		29000.00	7/81 12	0
5	MAX INCOME EMPLOYEE UNEMPLOYMENT TAX		6000.00	7/81 12	0
6	MAX INCOME EMPLOYER SOC SEC TAX		29000.00	7/81 12	0
7	OPPORTUNITY COST FOR MANAGEMENT	000	26000.00	7/81 12	0
8	INSURANCE FEES FOR CREW AND HULL		6700.00	7/81 12	0
9	GROCERIES PER PERSON, ONE DAY TRIP		6.00	7/81 12	0
10	BAR OF ICE (300 LB)		4.00	7/81 12	0
11	CREW'S EXPENSE FOR FREEZER OPERATION PER DAY		12.50	7/81 12	0
12	CREW'S EXPENSE FOR NET REPAIR PER LB		0.02	7/81 12	0
13	BAY DIESEL PER GALLON		0.99	7/81 12	0
14	BAY ICE PER LB.		0.01	7/81 12	0

SUMMARY: MAXIMUM FILE SIZE = 200
NUMBER OF RECORDS IN FILE = 14

APPENDIX G

Examples of JCL to execute the FORTRAN programs for both aquaculture and vessel simulation.

```
1.      //GRIFFIN JOB (L679,4D,S10,010,CA),'NO STAPLES'
2.      //*LEVEL  1
3.      //*FORMAT  PR,DDNAME=,DEST=XEROX,FORMS=1101
4.      //PROCLIB  DD  DSN=USR.L679.CA.PROCLIB,DISP=SHR
5.      //   EXEC  ADAMSJCL
6.      //SYSIN  DD  DSN=USR.L679.CA.AQUAFTFL,DISP=SHR
7.      //*END
```

```
1.      //ADAMSJCL  PROC
2.      //GO EXEC PGM=AQUAFORT,REGION=448K
3.      //STEPLIB   DD  DSN=USR.L679.CA.JOBLIB,DISP=SHR
4.      //FT05F001  DD  DDNAME=SYSIN
5.      //FT06F001  DD  SYSOUT=A
6.      //FT22F001  DD  SYSOUT=A,DCB=RECFM=FA
7.      //FT23F001  DD  SYSOUT=A,DCB=RECFM=FA
8.      //FT24F001  DD  SYSOUT=A,DCB=RECFM=FA
9.      //FT25F001  DD  SYSOUT=A,DCB=RECFM=FA
10.     //FT26F001  DD  SYSOUT=A,DCB=RECFM=FA
11.     //FT27F001  DD  SYSOUT=A,DCB=RECFM=FA
12.     //FT28F001  DD  SYSOUT=A,DCB=RECFM=FA
13.     //FT29F001  DD  SYSOUT=A,DCB=RECFM=FA
14.     //FT30F001  DD  SYSOUT=A,DCB=RECFM=FA
15.     //FT31F001  DD  SYSOUT=A,DCB=RECFM=FA
16.     //FT32F001  DD  SYSOUT=A,DCB=RECFM=FA
17.     //FT33F001  DD  SYSOUT=A,DCB=RECFM=FA
18.     //FT34F001  DD  SYSOUT=A,DCB=RECFM=FA
19.     //FT35F001  DD  SYSOUT=A,DCB=RECFM=FA
20.     //FT36F001  DD  SYSOUT=A,DCB=RECFM=FA
21.     //FT37F001  DD  SYSOUT=A,DCB=RECFM=FA
22.     //FT38F001  DD  SYSOUT=A,DCB=RECFM=FA
23.     //FT08F001  DD  DSN=USR.L679.CA.TAXTABLE,SPACE=(13030,1),
24.     //          DCB=(DSORG=PS,LRECL=13026,RECFM=VS,BLKSIZE=13030),
25.     //          DISP=(SHR)
26.     //FT10F001  DD  DSN=USR.L679.CA.ABEQPSPL,SPACE=(56,500),
27.     //          DCB=(DSORG=DA,LRECL=56,RECFM=F),DISP=(OLD,KEEP)
28.     //FT11F001  DD  DSN=USR.L679.CA.ABMACHIN,SPACE=(84,500),
29.     //          DCB=(DSORG=DA,LRECL=84,RECFM=F),DISP=(OLD,KEEP)
30.     //FT12F001  DD  DSN=USR.L679.CA.ABOVERHD,SPACE=(48,250),
31.     //          DCB=(DSORG=DA,LRECL=48,RECFM=F),DISP=(OLD,KEEP)
32.     //FT13F001  DD  DSN=USR.L679.CA.ABPARMTR,SPACE=(38,250),
33.     //          DCB=(DSORG=DA,LRECL=38,RECFM=F),DISP=(OLD,KEEP)
34.     //FT14F001  DD  DSN=USR.L679.CA.ABPOWERC,SPACE=(52,250),
35.     //          DCB=(DSORG=DA,LRECL=52,RECFM=F),DISP=(OLD,KEEP)
36.     //FT15F001  DD  DSN=USR.L679.CA.ABPRICEV,SPACE=(46,1000),
37.     //          DCB=(DSORG=DA,LRECL=46,RECFM=F),DISP=(OLD,KEEP)
38.     //FT16F001  DD  DSN=USR.L679.CA.ABPUMPCM,SPACE=(52,250),
39.     //          DCB=(DSORG=DA,LRECL=52,RECFM=F),DISP=(OLD,KEEP)
40.     //FT17F001  DD  DSN=USR.L679.CA.ABHARVST,SPACE=(94,500),
41.     //          DCB=(DSORG=DA,LRECL=94,RECFM=F),DISP=(OLD,KEEP)
42.     //FT18F001  DD DSN=USR.L679.LJ.TEMPSTOR,DISP=SHR
43.     //FT19F001  DD DSN=USR.L679.CA.ASTORBUD,DISP=(OLD,KEEP),
44.     //         SPACE=(84,100),DCB=(DSORG=DA,LRECL=84,BLKSIZE=84,RECFM=F)
45.     //FT20F001  DD DSN=USR.L679.LJ.SQUEEZ,DISP=(OLD,KEEP),
46.     //         SPACE=(84,100),DCB=(DSORG=DA,LRECL=84,BLKSIZE=84,RECFM=F)
```

VESSELS

```
1.    //FORTRAN   JOB   (L679,4A,S20,020,WG),'GRIFFIN',MSGLEVEL=(1,0)
2.    //*LEVEL    1
3.    //*FORMAT PR,DDNAME=,DEST=XEROX,FORMS=1101
4.    //PROCLIB  DD  DSN=USR.L679.LJ.PROCLIB,DISP=SHR
5.    //  EXEC  JCLFORVB
6.    //SYSIN  DD  DSN=USR.L679.LJ.VESSFTFL,DISP=SHR
7.    //
```

```
1.    //BUDFORT  PROC
2.    //GO EXEC PGM=VESSBUD,REGION=256K
3.    //STEPLIB   DD  DSN=USR.L679.CA.JOBLIB,DISP=SHR
4.    //FT05F001  DD  DDNAME=SYSIN
5.    //FT06F001  DD  SYSOUT=A
6.    //FT80F001  DD  SYSOUT=A,DCB=RECFM=FA
7.    //FT81F001  DD  SYSOUT=A,DCB=RECFM=FA
8.    //FT82F001  DD  SYSOUT=A,DCB=RECFM=FA
9.    //FT83F001  DD  SYSOUT=A,DCB=RECFM=FA
10.   //FT84F001  DD  SYSOUT=A,DCB=RECFM=FA
11.   //FT85F001  DD  SYSOUT=A,DCB=RECFM=FA
12.   //FT86F001  DD  SYSOUT=A,DCB=RECFM=FA
13.   //FT87F001  DD  SYSOUT=A,DCB=RECFM=FA
14.   //FT88F001  DD  SYSOUT=A,DCB=RECFM=FA
15.   //FT89F001  DD  SYSOUT=A,DCB=RECFM=FA
16.   //FT90F001  DD  SYSOUT=A,DCB=RECFM=FA
17.   //FT91F001  DD  SYSOUT=A,DCB=RECFM=FA
18.   //FT92F001  DD  SYSOUT=A,DCB=RECFM=FA
19.   //FT93F001  DD  SYSOUT=A,DCB=RECFM=FA
20.   //FT94F001  DD  SYSOUT=A,DCB=RECFM=FA
21.   //FT95F001  DD  SYSOUT=A,DCB=RECFM=FA
22.   //FT96F001  DD  SYSOUT=A,DCB=RECFM=FA
23.   //FT97F001  DD  SYSOUT=A,DCB=RECFM=FA
24.   //FT99F001  DD  SYSOUT=A,DCB=RECFM=FA
25.   //FT08F001  DD  DSN=USR.L679.CA.JO56.TAXTABLE,SPACE=(13030,1),
26.   //          DCB=(DSORG=PS,LRECL=13026,RECFM=VS,BLKSIZE=13030),
27.   //          VOL=SER=USER4A,UNIT=DISK,DISP=(SHR)
28.   //FT10F001  DD  DSN=USR.L679.LJ.JO56.VBCATCH,DISP=SHR
29.   //FT11F001  DD  DSN=USR.L679.LJ.JO56.VBCPRICE,DISP=SHR
30.   //FT12F001  DD  DSN=USR.L679.LJ.JO56.VBEFFORT,DISP=SHR
31.   //FT14F001  DD  DSN=USR.L679.LJ.JO56.VBENGINE,DISP=SHR
32.   //FT15F001  DD  DSN=USR.L679.LJ.JO56.VBEQUIPM,DISP=SHR
33.   //FT16F001  DD  DSN=USR.L679.LJ.JO56.VBGEARS,DISP=SHR
34.   //FT17F001  DD  DSN=USR.L679.LJ.JO56.VBHULLS,DISP=SHR
35.   //FT18F001  DD  DSN=USR.L679.LJ.JO56.VBPAYPS,DISP=SHR
36.   //FT19F001  DD  DSN=USR.L679.LJ.JO56.VBPCOST,DISP=SHR
37.   //FT20F001  DD  DSN=USR.L679.LJ.JO56.VBRATES,DISP=SHR
38.   //FT21F001  DD  DSN=USR.L679.LJ.JO56.VBVCOST,DISP=SHR
39.   //FT25F001  DD  DSN=USR.L679.LJ.TEMPSTOR,DISP=SHR
40.   //FT37F001  DD  DSN=USR.L679.LJ.SQUEEZ,SPACE=(84,100),
41.   //          DCB=(DSORG=DA,LRECL=84,BLKSIZE=84,RECFM=F),VOL=SER=USER4E,
42.   //          UNIT=DISK,DISP=(OLD,KEEP)
43.   //FT39F001  DD  DSN=USR.L679.LJ.VSTORBUD,SPACE=(84,100),
44.   //          DCB=(DSORG=DA,LRECL=84,BLKSIZE=84,RECFM=F),VOL=SER=USER4E,
45.   //          UNIT=DISK,DISP=(OLD,KEEP)
```

APPENDIX H

FORTRAN control flow for aquaculture.

```
DSCR
THIS IS A TEST BUDGET.
END*
TITL
SIXTEEN TANK MATURATION/REPRODUCTION FACILITY AT CORPUS CHRISTI,TEXAS 1980.
END*
FTNT
FACILITY SIZE OF SIXTEEN TANKS WITH OUTPUT OF 57600000 NAUPLI/MO.
INTEREST RATE IS DERIVED FROM 15% PLUS 5% PLUS 3% SURCHARGE,BANK OF A&M.
THE TANKS USED IN THE MATURATION ROOM ARE 12 FOOT IN DIAMETER.
END*
PRNT
    1 1 1 1 1 1 1 1 1
END*
FNCL
   10  1   2000    1000 1 2 3   25
END*
SYSD
GIVN
    12 FOOT DIAMETER TANKS                    10.0
 7     2       2 10                  4
END*
BLDG
 7     3    5000 10
END*
EQMT
 1     1       1 1
END*
MACH
 3     1       1 2
END*
PROD
 2     1       1
      10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000
       2.20  2.20  2.20  2.20  2.20  2.20  2.20  2.20  2.20  2.20  2.20  2.20
END*
VARC
LABR           1       1       1       1       1       1
 7     1
LABR           1       1       1       1       1       1
 7     1
STCK         280                     280
 7     5     280                     280
FEED         329     297     329     318     329     318
 7     6     329     329     318     329     318     329
SPC1           8       8       8       8       8       8
 7     8       8       8       8       8       8       8
FUEL         104     104     104     104     104     104
 7     4     104     104     104     104     104     104
SUPP           1
 7     7
END*
OVHD
 4     1 1
END*
SLRY
 4     2  1 1 1 1 1 1 1 1 1 1 1 1
 4     3  3 1 1 1 1 1 1 1 1 1 1 1
END*
BUD1
    1 01 SHIPPING SUPPLIES
END*
BUD2
END*
BUD3
END*
STOP
```

APPENDIX I

FORTRAN control flow for vessels.

```
OUTO
      1 1 1 1 1 1 1   1 1 1 1 1
END*
TITL
     THIS IS A SAMPLE DATA SET TO TEST THE
     VESSEL BUDGET SIMULATION SYSTEM.
     THIS VESSEL OPERATES OUT OF TEXAS. IT FISHES
     COMERICALLY FOR SHRIMP AND ACTS AS A CHARTER
     VESSEL ONE DAY A MONTH.
END*
FOOT
     SAMPLE FOOTNOTE
         FOR
     TESTING PURPOSES
END*
OREP
    NET REPAIR
END*
ORPL
    NET REPLACEMENTS
END*
FINC
     1  8  100000.00     2000.00
END*
SHRS
    .20 .15 .67 .33 .20 .15 .20 .15 .20 .15 .20 .15 .20 .15
END*
ACCH
    TEST BUDGET
END*
GROC
21    2
END*
PAYP
10            13 1.001.001.001.001.001.001.001.001.001.001.001.00
18             1 1.001.001.001.001.001.001.001.001.001.001.001.00
12            13 1.001.001.001.001.001.001.001.001.001.001.001.00
END*
COMB
10             1 1.001.001.001.001.001.001.001.001.001.001.001.00
11             1 1.001.001.001.001.001.001.001.001.001.001.001.00
12       2     1 1.001.001.001.001.001.001.001.001.001.001.001.00
END*
HULL
17             1 6 1.00     1 0002      1  20       8
END*
ENGN
14         1   1 5 1.00     1                  1  20       8
14         2   2 4 1.00     1                  1  20       8
END*
EQMT
15         2   1 6 1.00     1.00
15         1   3 6 1.00     1.00
15         1   4 6 1.00  5  1.00  5
END*
GEAR
16         1   1 2 1.00     1.00
16         2   4 2 1.00  6  1.00  6
```

```
END*
OINV
          2 OPTIONAL INVENTORY TEST ITEM
       100.00 1  1.00 1 1.00     4    4  2  0.2
END*
OVAR
    OPTIONAL VAR. COST--HEADER                    50.00      50.00      50.00
         50.00      50.00      50.00      50.00      50.00      50.00      50.00
         50.00      50.00  .20  .15
END*
FIXC
            1   8
END*
OFIX
    OPTIONAL FIXED COST TEST                        2    100.00
END*
OMFX
    OPTIONAL MONTHLY FIXED COST TEST          6.00       6.00       6.00       6.00
      6.00       6.00       6.00       6.00       6.00       6.00       6.00       6.00
END*
INSR
20  4
END*
TAXS
    1   1   1
END*
OPPC
END*
BRKE
END*
STOP
```

APPENDIX J

Output from FORTRAN program for aquaculture.

A GENERALIZED BUDGET SIMULATION

AQUACULTURE BUDGET SIMULATION SYSTEM

WADE L. GRIFFIN, PROJECT DIRECTOR

CHARLES M. ADAMS, CO-PRINCIPAL INVESTIGATOR

LINDA A. JENSEN, CO-PRINCIPAL INVESTIGATOR

WITH

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TEXAS A&M UNIVERSITY

DEPARTMENT OF AGRICULTURAL ECONOMICS
TEXAS AGRICULTURAL EXPERIMENT STATION
COLLEGE STATION, TEXAS 77843

AQUACULTURE BUDGET SIMULATION - SYSTEM DESCRIPTION

```
*****************************************************************************************
*                                                                                       *
*    THIS IS A TEST BUDGET.                                                             *
*                                                                                       *
*****************************************************************************************
```

AQUACULTURAL BUDGET SIMULATION SYSTEM
INITIAL CAPITAL INVESTMENT DESCRIPTION
SIXTEEN TANK MATURATION/REPRODUCTION FACILITY AT CORPUS CHRISTI,TEXAS 1980.

---->FACILITY SIZE AND TECHNICAL UNIT = 10.00 12 FOOT DIAMETER TANKS

ITEM DESCRIPTION	QUANTITY	UNIT PRICE	QUANTITY PER TECHNICAL UNIT	COST PER TECHNICAL UNIT	TOTAL COST
FACILITY CONSTRUCTION:					
LAND TEXAS COAST	2	1500.00	0.2000	300.00	3000.00
MATERIALS AND BUILDINGS:					
BUILDING/SQ FT	5000	40.00	500.0000	20000.00	200000.00
EQUIPMENT:					
ICE MACHINE	1	1920.00	0.1000	192.00	1920.00
MACHINERY:					
AUTOMOBILE/STATIONWAGON	1	11000.00	0.1000	1100.00	11000.00
TOTAL				21592.	215920.

FACILITY SIZE OF SIXTEEN TANKS WITH OUTPUT OF 57600000 NAUPLI/MO.
INTEREST RATE IS DERIVED FROM 15% PLUS 5% PLUS 3% SURCHARGE,BANK OF A&M.
THE TANKS USED IN THE MATURATION ROOM ARE 12 FOOT IN DIAMETER.

AQUACULTURE BUDGET SIMULATION SYSTEM - VARIABLE INPUT BY MONTH IN UNITS

---->FACILITY SIZE AND TECHNICAL UNIT = 10.00 12 FOOT DIAMETER TANKS

ITEM DESCRIPTION	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	YEAR TOTAL
REPAIR FOR ICE MACHINE	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	19.20
REPAIRS FOR AUTOMOBILE/STATIONWAGON	45.83	45.83	45.83	45.83	45.83	45.83	45.83	45.83	45.83	45.83	45.83	45.83	550.00
LABOR/PART TIME/MONTH	1.00	1.00	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	6.00
LABOR/PART TIME/MONTH	1.00	1.00	1.00	1.00	1.00	1.00	0.0	0.0	0.0	0.0	0.0	0.0	6.00
BROODSTOCK RESTOCK 280/4 MO.	280.00	0.0	0.0	280.00	0.0	0.0	280.00	0.0	0.0	280.00	0.0	0.0	1120.00
SQUID FEED/LB	329.00	297.00	329.00	318.00	329.00	318.00	329.00	329.00	318.00	329.00	318.00	329.00	3872.00
OXYGEN REFILL/SHIPPING	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	96.00
FUEL UNLEADED/GAL.	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00	104.00	1248.00
PETRI DISHES	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00

FACILITY SIZE OF SIXTEEN TANKS WITH OUTPUT OF 57600000 NAUPLI/MO.
INTEREST RATE IS DERIVED FROM 15% PLUS 5% PLUS 3% SURCHARGE,BANK OF A&M.
THE TANKS USED IN THE MATURATION ROOM ARE 12 FOOT IN DIAMETER.

SUDGET SIMULATION SYSTEM - VARIABLE INPUT BY MONTH IN UNITS PER TECHNICAL UNIT

---->FACILITY SIZE AND TECHNICAL UNIT = 10.00 12 FOOT DIAMETER TANKS

ITEM DESCRIPTION	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	YEAR TOTAL
REPAIR FOR ICE MACHINE	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	1.92
REPAIRS FOR AUTOMOBILE/STATIONWAGON	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58	55.00
LABOR/PART TIME/MONTH	0.10	0.10	0.10	0.10	0.10	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.60
LABOR/PART TIME/MONTH	0.10	0.10	0.10	0.10	0.10	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.60
BROODSTOCK RESTOCK 280/4 MO.	28.00	0.0	0.0	28.00	0.0	0.0	28.00	0.0	0.0	28.00	0.0	0.0	112.00
SQUID FEED/LB	32.90	29.70	32.90	31.80	32.90	31.80	32.90	32.90	31.80	32.90	31.80	32.90	387.20
OXYGEN REFILL/SHIPPING	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	9.60
FUEL UNLEADED/GAL.	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	124.80
PETRI DISHES	0.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10

FACILITY SIZE OF SIXTEEN TANKS WITH OUTPUT OF 57600000 NAUPLI/MO.
INTEREST RATE IS DERIVED FROM 15% PLUS 5% PLUS 3% SURCHARGE,BANK OF A&M.
THE TANKS USED IN THE MATURATION ROOM ARE 12 FOOT IN DIAMETER.

AQUACULTURE BUDGET SIMULATION SYSTEM - VARIABLE INPUT BY MONTH IN DOLLARS

---->FACILITY SIZE AND TECHNICAL UNIT = 10.00 12 FOOT DIAMETER TANKS

ITEM DESCRIPTION	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	YEAR TOTAL
REPAIR FOR ICE MACHINE	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	19.20
REPAIRS FOR AUTOMOBILE/STATIONWAGON	45.83	45.83	45.83	45.83	45.83	45.83	45.83	45.83	45.83	45.83	45.83	45.83	550.00
LABOR/PART TIME/MONTH	700.00	700.00	700.00	700.00	700.00	700.00	0.0	0.0	0.0	0.0	0.0	0.0	4200.00
LABOR/PART TIME/MONTH	700.00	700.00	700.00	700.00	700.00	700.00	0.0	0.0	0.0	0.0	0.0	0.0	4200.00
BROODSTOCK RESTOCK 280/4 MO.	11200.00	0.0	0.0	11200.00	0.0	0.0	11200.00	0.0	0.0	11200.00	0.0	0.0	44800.00
SQUID FEED/LB	246.75	222.75	246.75	238.50	246.75	238.50	246.75	246.75	238.50	246.75	238.50	246.75	2904.00
OXYGEN REFILL/SHIPPING	68.00	68.00	68.00	68.00	68.00	68.00	68.00	68.00	68.00	68.00	68.00	68.00	816.00
FUEL UNLEADED/GAL.	122.72	122.72	122.72	122.72	122.72	122.72	122.72	122.72	122.72	122.72	122.72	122.72	1472.64
PETRI DISHES	100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.00
	13184.90	1860.90	1884.90	13076.65	1884.90	1876.65	11684.90	484.90	476.65	11684.90	476.65	484.90	59061.81

FACILITY SIZE OF SIXTEEN TANKS WITH OUTPUT OF 57600000 NAUPLI/MO.
INTEREST RATE IS DERIVED FROM 15% PLUS 5% PLUS 3% SURCHARGE,BANK OF A&M.
THE TANKS USED IN THE MATURATION ROOM ARE 12 FOOT IN DIAMETER.

AQUACULTURE BUDGET SIMULATION SYSTEM - VARIABLE INPUT BY MONTH IN DOLLARS PER TECHNICAL UNIT

---->FACILITY SIZE AND TECHNICAL UNIT = 10.00 12 FOOT DIAMETER TANKS

ITEM DESCRIPTION	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	YEAR TOTAL
REPAIR FOR ICE MACHINE	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	1.92
REPAIRS FOR AUTOMOBILE/STATIONWAGON	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58	55.00
LABOR/PART TIME/MONTH	70.00	70.00	70.00	70.00	70.00	70.00	0.0	0.0	0.0	0.0	0.0	0.0	420.00
LABOR/PART TIME/MONTH	70.00	70.00	70.00	70.00	70.00	70.00	0.0	0.0	0.0	0.0	0.0	0.0	420.00
BROODSTOCK RESTOCK 280/4 MO.	1120.00	0.0	0.0	1120.00	0.0	0.0	1120.00	0.0	0.0	1120.00	0.0	0.0	4480.00
SQUID FEED/LB	24.67	22.27	24.67	23.85	24.67	23.85	24.67	24.67	23.85	24.67	23.85	24.67	290.40
OXYGEN REFILL/SHIPPING	6.80	6.80	6.80	6.80	6.80	6.80	6.80	6.80	6.80	6.80	6.80	6.80	81.60
FUEL UNLEADED/GAL.	12.27	12.27	12.27	12.27	12.27	12.27	12.27	12.27	12.27	12.27	12.27	12.27	147.26
PETRI DISHES	10.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.00
	1318.49	186.09	188.49	1307.66	188.49	187.67	1168.49	48.49	47.67	1168.49	47.67	48.49	5906.17

FACILITY SIZE OF SIXTEEN TANKS WITH OUTPUT OF 57600000 NAUPLI/MO.
INTEREST RATE IS DERIVED FROM 15% PLUS 5% PLUS 3% SURCHARGE,BANK OF A&M.
THE TANKS USED IN THE MATURATION ROOM ARE 12 FOOT IN DIAMETER.

AQUACULTURE BUDGET SIMULATION SYSTEM - PRODUCTION BY MONTH IN UNITS

---->FACILITY SIZE AND TECHNICAL UNIT = 10.00 12 FOOT DIAMETER TANKS

ITEM DESCRIPTION	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	YEAR TOTAL
PENAEUS NAUPLII (PRICE/1000)	10000.00	10000.00	10000.00	10000.00	10000.00	10000.00	10000.00	10000.00	10000.00	10000.00	10000.00	10000.00	120000.00

FACILITY SIZE OF SIXTEEN TANKS WITH OUTPUT OF 57600000 NAUPLI/MO.
INTEREST RATE IS DERIVED FROM 15% PLUS 5% PLUS 3% SURCHARGE,BANK OF A&M.
THE TANKS USED IN THE MATURATION ROOM ARE 12 FOOT IN DIAMETER.

AQUACULTURE BUDGET SIMULATION SYSTEM - PRODUCTION BY MONTH IN UNITS PER TECHNICAL UNIT

---->FACILITY SIZE AND TECHNICAL UNIT = 10.00 12 FOOT DIAMETER TANKS

ITEM DESCRIPTION	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	YEAR TOTAL
PENAEUS NAUPLII (PRICE/1000)	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	12000.00

FACILITY SIZE OF SIXTEEN TANKS WITH OUTPUT OF 57600000 NAUPLI/MO.
INTEREST RATE IS DERIVED FROM 15% PLUS 5% PLUS 3% SURCHARGE,BANK OF A&M.
THE TANKS USED IN THE MATURATION ROOM ARE 12 FOOT IN DIAMETER.

AQUACULTURE BUDGET SIMULATION SYSTEM - PRODUCTION BY MONTH IN DOLLARS

---->FACILITY SIZE AND TECHNICAL UNIT = 10.00 12 FOOT DIAMETER TANKS

ITEM DESCRIPTION	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	YEAR TOTAL
PENAEUS NAUPLII (PRICE/1000)	22000.00	22000.00	22000.00	22000.00	22000.00	22000.00	22000.00	22000.00	22000.00	22000.00	22000.00	22000.00 ,	263999.37
	22000.00	22000.00	22000.00	22000.00	22000.00	22000.00	22000.00	22000.00	22000.00	22000.00	22000.00	22000.00	263999.37

FACILITY SIZE OF SIXTEEN TANKS WITH OUTPUT OF 57600000 NAUPLI/MO.
INTEREST RATE IS DERIVED FROM 15% PLUS 5% PLUS 3% SURCHARGE,BANK OF A&M.
THE TANKS USED IN THE MATURATION ROOM ARE 12 FOOT IN DIAMETER.

AQUACULTURE BUDGET SIMULATION SYSTEM - PRODUCTION BY MONTH IN DOLLARS PER TECHNICAL UNIT

---->FACILITY SIZE AND TECHNICAL UNIT = 10.00 12 FOOT DIAMETER TANKS

ITEM DESCRIPTION	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	YEAR TOTAL
PENAEUS NAUPLII (PRICE/1000)	2200.00	2200.00	2200.00	2200.00	2200.00	2200.00	2200.00	2200.00	2200.00	2200.00	2200.00	2200.00	26399.96
	2200.00	2200.00	2200.00	2200.00	2200.00	2200.00	2200.00	2200.00	2200.00	2200.00	2200.00	2200.00	26399.96

FACILITY SIZE OF SIXTEEN TANKS WITH OUTPUT OF 57600000 NAUPLI/MO.
INTEREST RATE IS DERIVED FROM 15% PLUS 5% PLUS 3% SURCHARGE,BANK OF A&M.
THE TANKS USED IN THE MATURATION ROOM ARE 12 FOOT IN DIAMETER.

AQUACULTURAL BUDGET SIMULATION SYSTEM
SIXTEEN TANK MATURATION/REPRODUCTION FACILITY AT CORPUS CHRISTI,TEXAS 1980.
DETAILED ANNUAL (YEAR 1) BUDGET

---->FACILITY SIZE AND TECHNICAL UNIT = 10.00 12 FOOT DIAMETER TANKS

	QUANTITY	PER UNIT PRICE OR COST	TOTAL COST OR VALUE
I. PRODUCTION -			
PENAEUS NAUPLII (PRICE/1000)	120000.	$ 2.20	$ 263999.
TOTAL PRODUCTION VALUE			$ 263999.
II. VARIABLE COST -			
STOCKING SEED AND FRY			
BROODSTOCK RESTOCK 280/4 MO.	1120.	$ 40.00	$ 44800.
SUB TOTAL			$ 44800.
REPAIR AND MAINTENANCE-EQUIPMENT			
ICE MACHINE	19.	$ 1.00	$ 19.
SUB TOTAL			$ 19.
REPAIR AND MAINTENANCE-MACHINERY			
AUTOMOBILE/STATIONWAGON	550.	$ 1.00	$ 550.
SUB TOTAL			$ 550.
FUEL			
FUEL UNLEADED/GAL.	1248.	$ 1.18	$ 1473.
SUB TOTAL			$ 1473.
FEED AND RATION SUPPLEMENTS			
SQUID FEED/LB	3872.	$ 0.75	$ 2904.
SUB TOTAL			$ 2904.
LABOR AND WAGES			
LABOR/PART TIME/MONTH	6.	$ 700.00	$ 4200.
LABOR/PART TIME/MONTH	6.	$ 700.00	$ 4200.
SUB TOTAL			$ 8400.
SUPPLIES			
PETRI DISHES	1.	$ 100.00	$ 100.
SUB TOTAL			$ 100.
SHIPPING SUPPLIES			
OXYGEN REFILL/SHIPPING	96.	$ 8.50	$ 816.
SUB TOTAL			$ 816.

PAYROLL TAXES		
EMPLOYEE SOC. SEC. TAX		559.
UNEMPLOYMENT TAX		67.
EMPLOYEE INSURANCE		686.
SUB TOTAL	$	1312.
TOTAL VARIABLE COST	$	60374.
III. FIXED COST -		
OVERHEAD		
PERMIT FOR BUILDING		148.
MANAGER'S MONTHLY SALARY		24000.
ASSNT MANAGER'S MONTHLY SALARY		54000.
SUB TOTAL	$	78148.
DEPRECIATION		44880.
SUB TOTAL	$	44880.
INTEREST		
CASH BALANCE MAINTENANCE		26.
MEDIUM-TERM INTEREST		1476.
LONG-TERM INTEREST		25641.
SUB TOTAL	$	27143.
INSURANCE		
PROPERTY INSURANCE		9098.
SALARIED PERSONNEL INSURANCE		6373.
SUB TOTAL	$	15471.
TAXES		
PROPERTY TAX		1054.
SALARIED PERSONNEL SOCIAL SECURITY TAX		5187.
SALARIED PERSONNEL UNEMPLOYMENT TAX		192.
SUB TOTAL	$	6433.
TOTAL FIXED COST	$	172074.
IV. NET RETURNS (BEFORE INCOME TAX)	$	31552.
V. TAXES		
FEDERAL INCOME TAX	$	6310.
STATE INCOME TAX	$	316.
NET TAX	$	6626.
VI. NET RETURNS (AFTER TAX)	$	24926.

VII. OPPORTUNITY COST		
OWNERS RETURN TO EQUITY CAPITAL	$	10527.
VIII. PURE ECONOMIC PROFIT	$	14399.
IX. BREAK-EVEN VALUES		
BREAK-EVEN AVERAGE PRICE	$	1.94
BREAK-EVEN PRODUCTION		105658.

FACILITY SIZE OF SIXTEEN TANKS WITH OUTPUT OF 57600000 NAUPLI/MO.
INTEREST RATE IS DERIVED FROM 15% PLUS 5% PLUS 3% SURCHARGE,BANK OF A&M.
THE TANKS USED IN THE MATURATION ROOM ARE 12 FOOT IN DIAMETER.

AQUACULTURAL BUDGET SIMULATION SYSTEM
SIXTEEN TANK MATURATION/REPRODUCTION FACILITY AT CORPUS CHRISTI,TEXAS 1980.
AGGREGATED ANNUAL (YEAR 1) BUDGET

---->FACILITY SIZE AND TECHNICAL UNIT = 10.00 12 FOOT DIAMETER TANKS

I. PRODUCTION -		
TOTAL PRODUCTION VALUE	$	263999.
II. VARIABLE COST -		
STOCKING SEED AND FRY		
SUB TOTAL	$	44800.
REPAIR AND MAINTENANCE-EQUIPMENT		
SUB TOTAL	$	19.
REPAIR AND MAINTENANCE-MACHINERY		
SUB TOTAL	$	550.
FUEL		
SUB TOTAL	$	1473.
FEED AND RATION SUPPLEMENTS		
SUB TOTAL	$	2904.
LABOR AND WAGES		
SUB TOTAL	$	8400.
SUPPLIES		
SUB TOTAL	$	100.
SHIPPING SUPPLIES		
SUB TOTAL	$	816.
PAYROLL TAXES		
SUB TOTAL	$	1312.
TOTAL VARIABLE COST	$	60374.
III. FIXED COST -		
OVERHEAD		
SUB TOTAL	$	78148.
DEPRECIATION		
SUB TOTAL	$	44880.
INTEREST		
SUB TOTAL	$	27143.
INSURANCE		
SUB TOTAL	$	15471.
TAXES		
SUB TOTAL	$	6433.

	TOTAL FIXED COST	$	172074.
IV.	NET RETURNS (BEFORE INCOME TAX)	$	31552.
V.	TAXES		
	FEDERAL INCOME TAX	$	6310.
	STATE INCOME TAX	$	316.
	NET TAX	$	6626.
VI.	NET RETURNS (AFTER TAX)	$	24926.
VII.	OPPORTUNITY COST		
	OWNERS RETURN TO EQUITY CAPITAL	$	10527.
VIII.	PURE ECONOMIC PROFIT	$	14399.
IX.	BREAK-EVEN VALUES		
	BREAK-EVEN AVERAGE PRICE	$	1.94
	BREAK-EVEN PRODUCTION		105658.

FACILITY SIZE OF SIXTEEN TANKS WITH OUTPUT OF 57600000 NAUPLI/MO.
INTEREST RATE IS DERIVED FROM 15% PLUS 5% PLUS 3% SURCHARGE,BANK OF A&M.
THE TANKS USED IN THE MATURATION ROOM ARE 12 FOOT IN DIAMETER.

AQUACULTURAL BUDGET SIMULATION SYSTEM
SIXTEEN TANK MATURATION/REPRODUCTION FACILITY AT CORPUS CHRISTI,TEXAS 1980.
GENERAL ANNUAL (YEAR 1) BUDGET

---->FACILITY SIZE AND TECHNICAL UNIT = 10.00 12 FOOT DIAMETER TANKS

I.	PRODUCTION -		
	TOTAL PRODUCTION VALUE	$	263999.
II.	VARIABLE COST -		
	TOTAL VARIABLE COST	$	60374.
III.	FIXED COST -		
	TOTAL FIXED COST	$	172074.
IV.	NET RETURNS (BEFORE INCOME TAX)	$	31552.
V.	TAXES		
	FEDERAL INCOME TAX	$	6310.
	STATE INCOME TAX	$	316.
	NET TAX	$	6626.
VI.	NET RETURNS (AFTER TAX)	$	24926.
VII.	OPPORTUNITY COST		
	OWNERS RETURN TO EQUITY CAPITAL	$	10527.
VIII.	PURE ECONOMIC PROFIT	$	14399.
IX.	BREAK-EVEN VALUES		
	BREAK-EVEN AVERAGE PRICE	$	1.94
	BREAK-EVEN PRODUCTION		105658.

FACILITY SIZE OF SIXTEEN TANKS WITH OUTPUT OF 57600000 NAUPLI/MO.
INTEREST RATE IS DERIVED FROM 15% PLUS 5% PLUS 3% SURCHARGE,BANK OF A&M.
THE TANKS USED IN THE MATURATION ROOM ARE 12 FOOT IN DIAMETER.

MONTHLY CASH FLOW STATEMENT (YEAR 1)
SIXTEEN TANK MATURATION/REPRODUCTION FACILITY AT CORPUS CHRISTI,TEXAS 1980.

---->FACILITY SIZE 10.00 12 FOOT DIAMETER TANKS

	MONTH					
	JAN	FEB	MAR	APR	MAY	JUN
1. RECEIPTS						
OPERATING	22000.	22000.	22000.	22000.	22000.	22000.
CAPITAL	0.	0.	0.	0.	0.	0.
BORROWING						
MID-TERM	8250.	0.	0.	0.	0.	0.
LONG-TERM	153690.	0.	0.	0.	0.	0.
TOTAL CASH INFLOW	183940.	22000.	22000.	22000.	22000.	22000.
2. EXPENDITURES						
OPERATING (VARIABLE INPUT)	13351.	2027.	2051.	13243.	2051.	2043.
TOTAL FIXED COST (TAXES,INSURANCE,OVERHEAD)	7514.	7366.	7366.	7366.	7330.	11879.
CAPITAL	215920.	0.	0.	0.	0.	0.
SCHEDULED DEBT PAYMENTS						
MID-TERM LOAN INTEREST	131.	129.	128.	127.	125.	124.
LONG-TERM LOAN INTEREST	2177.	2170.	2163.	2156.	2149.	2141.
MID-TERM LOAN PRINCIPLE	83.	85.	86.	87.	89.	90.
LONG-TERM LOAN PRINCIPLE	496.	503.	510.	517.	525.	532.
TOTAL DEBT PAYMENTS	2887.	2887.	2887.	2887.	2887.	2887.
TOTAL CASH OUTFLOW	239673.	12281.	12305.	23497.	12269.	16810.
3. FLOW OF FUNDS						
RECEIPTS MINUS EXPENDITURES	-55733.	9719.	9695.	-1497.	9731.	5190.
BEGINNING CASH BALANCE (MINIMUM--> 1000.)	55980.	1000.	9940.	19635.	18138.	27869.
CASH AVAILABLE BEFORE BORROWING	247.	10719.	19635.	18138.	27869.	33059.
REPAY OPERATING LOAN						
INTEREST	0.	26.	0.	0.	0.	0.
PRINCIPAL	0.	753.	0.	0.	0.	0.
BORROWING OPERATING LOAN	753.	0.	0.	0.	0.	0.
ENDING CASH BALANCE	1000.	9940.	19635.	18138.	27869.	33059.
4. SUMMARY OF DEBT OUTSTANDING						
OPERATING	753.	0.	0.	0.	0.	0.
MID-TERM	8167.	8082.	7996.	7908.	7820.	7729.
LONG-TERM	153194.	152691.	152181.	151663.	151138.	150606.
TOTAL DEBT OUTSTANDING	162113.	160773.	160176.	159571.	158958.	158335.
INTEREST BALANCE - OPERATING	13.	0.	0.	0.	0.	0.

MONTHLY CASH FLOW STATEMENT (YEAR 1)
SIXTEEN TANK MATURATION/REPRODUCTION FACILITY AT CORPUS CHRISTI,TEXAS 1980.

---->FACILITY SIZE 10.00 12 FOOT DIAMETER TANKS

	MONTH					
	JUL	AUG	SEP	OCT	NOV	DEC
1. RECEIPTS						
OPERATING	22000.	22000.	22000.	22000.	22000.	22000.
CAPITAL	0.	0.	0.	0.	0.	0.
BORROWING						
MID-TERM	0.	0.	0.	0.	0.	0.
LONG-TERM	0.	0.	0.	0.	0.	0.
TOTAL CASH INFLOW	22000.	22000.	22000.	22000.	22000.	22000.
2. EXPENDITURES						
OPERATING (VARIABLE INPUT)	11685.	485.	477.	11685.	477.	485.
TOTAL FIXED COST (TAXES,INSURANCE,OVERHEAD)	7330.	7330.	7330.	7330.	7330.	12933.
CAPITAL	0.	0.	0.	0.	0.	0.
SCHEDULED DEBT PAYMENTS						
MID-TERM LOAN INTEREST	122.	121.	119.	118.	116.	115.
LONG-TERM LOAN INTEREST	2134.	2126.	2118.	2110.	2102.	2094.
MID-TERM LOAN PRINCIPLE	92.	93.	95.	96.	98.	99.
LONG-TERM LOAN PRINCIPLE	540.	547.	555.	563.	571.	579.
TOTAL DEBT PAYMENTS	2887.	2887.	2887.	2887.	2887.	2887.
TOTAL CASH OUTFLOW	21903.	10703.	10694.	21903.	10694.	16305.
3. FLOW OF FUNDS						
RECEIPTS MINUS EXPENDITURES	97.	11297.	11306.	97.	11306.	5695.
BEGINNING CASH BALANCE (MINIMUM--> 1000.)	33059.	33156.	44454.	55760.	55857.	67163.
CASH AVAILABLE BEFORE BORROWING	33156.	44454.	55760.	55857.	67163.	72857.
REPAY OPERATING LOAN						
INTEREST	0.	0.	0.	0.	0.	0.
PRINCIPAL	0.	0.	0.	0.	0.	0.
BORROWING OPERATING LOAN	0.	0.	0.	0.	0.	0.
ENDING CASH BALANCE	33156.	44454.	55760.	55857.	67163.	72857.
4. SUMMARY OF DEBT OUTSTANDING						
OPERATING	0.	0.	0.	0.	0.	0.
MID-TERM	7638.	7545.	7450.	7354.	7257.	7158.
LONG-TERM	150066.	149519.	148964.	148401.	147830.	147251.
TOTAL DEBT OUTSTANDING	157704.	157064.	156414.	155755.	155086.	154408.
INTEREST BALANCE - OPERATING	0.	0.	0.	0.	0.	0.

AQUACULTURAL BUDGET SIMULATION SYSTEM
SIXTEEN TANK MATURATION/REPRODUCTION FACILITY AT CORPUS CHRISTI,TEXAS 1980.
MONTHLY COST SUMMARY (YEAR 1)

---->FACILITY SIZE 10.00 12 FOOT DIAMETER TANKS

	MONTH (END OF)					
	JAN	FEB	MAR	APR	MAY	JUN
1. PRODUCTION						
AVERAGE PRICE	2.	2.	2.	2.	2.	2.
YIELD	10000.	10000.	10000.	10000.	10000.	10000.
GROSS RECEIPTS	22000.	22000.	22000.	22000.	22000.	22000.
2. VARIABLE COST						
OPERATING EXPENSES (VARIABLE INPUT)	13185.	1861.	1885.	13077.	1885.	1877.
PAYROLL TAXES (LABOR WAGES)						
EMPLOYEE SOCIAL SECURITY TAX	47.	47.	47.	47.	47.	47.
EMPLOYEE UNEMPLOYMENT TAX	6.	6.	6.	6.	6.	6.
PAYROLL INSURANCE (WORKMAN COMPENSATION)	114.	114.	114.	114.	114.	114.
TOTAL VARIABLE COST	13351.	2027.	2051.	13243.	2051.	2043.
3. FIXED COST						
INSURANCE						
PROPERTY (BUILDING)	0.	0.	0.	0.	0.	4500.
PROPERTY (MACHINERY)	0.	0.	0.	0.	0.	49.
PAYROLL (SALARY-WORKMAN COMPENSATION)	531.	531.	531.	531.	531.	531.
OVERHEAD						
PERMIT FOR BUILDING	148.	0.	0.	0.	0.	0.
MANAGER'S MONTHLY SALARY	2000.	2000.	2000.	2000.	2000.	2000.
ASSNT MANAGER'S MONTHLY SALARY	4500.	4500.	4500.	4500.	4500.	4500.
TAXES						
SALARY PERSONNEL SOCIAL SECURITY TAX	299.	299.	299.	299.	299.	299.
SALARY PERSONNEL UNEMPLOYMENT TAX	36.	36.	36.	36.	0.	0.
PROPERTY TAX	0.	0.	0.	0.	0.	0.

AQUACULTURAL BUDGET SIMULATION SYSTEM
SIXTEEN TANK MATURATION/REPRODUCTION FACILITY AT CORPUS CHRISTI,TEXAS 1980.
MONTHLY COST SUMMARY (YEAR 1)

---->FACILITY SIZE 10.00 12 FOOT DIAMETER TANKS

	MONTH (END OF)					
	JUL	AUG	SEP	OCT	NOV	DEC
1. PRODUCTION						
AVERAGE PRICE	2.	2.	2.	2.	2.	2.
YIELD	10000.	10000.	10000.	10000.	10000.	10000.
GROSS RECEIPTS	22000.	22000.	22000.	22000.	22000.	22000.
2. VARIABLE COST						
OPERATING EXPENSES (VARIABLE INPUT)	11685.	485.	477.	11685.	477.	485.
PAYROLL TAXES (LABOR WAGES)						
EMPLOYEE SOCIAL SECURITY TAX	0.	0.	0.	0.	0.	0.
EMPLOYEE UNEMPLOYMENT TAX	0.	0.	0.	0.	0.	0.
PAYROLL INSURANCE (WORKMAN COMPENSATION)	0.	0.	0.	0.	0.	0.
TOTAL VARIABLE COST	11685.	485.	477.	11685.	477.	485.
3. FIXED COST						
INSURANCE						
PROPERTY (BUILDING)	0.	0.	0.	0.	0.	4500.
PROPERTY (MACHINERY)	0.	0.	0.	0.	0.	49.
PAYROLL (SALARY-WORKMAN COMPENSATION)	531.	531.	531.	531.	531.	531.
OVERHEAD						
PERMIT FOR BUILDING	0.	0.	0.	0.	0.	0.
MANAGER'S MONTHLY SALARY	2000.	2000.	2000.	2000.	2000.	2000.
ASSNT MANAGER'S MONTHLY SALARY	4500.	4500.	4500.	4500.	4500.	4500.
TAXES						
SALARY PERSONNEL SOCIAL SECURITY TAX	299.	299.	299.	299.	299.	299.
SALARY PERSONNEL UNEMPLOYMENT TAX	0.	0.	0.	0.	0.	0.
PROPERTY TAX	0.	0.	0.	0.	0.	1054.

ANNUAL CASH FLOW STATEMENT
SIXTEEN TANK MATURATION/REPRODUCTION FACILITY AT CORPUS CHRISTI,TEXAS 1980.

---->FACILITY SIZE 10.00 12 FOOT DIAMETER TANKS

	YEAR (END OF)									
	1	2	3	4	5	6	7	8	9	10
1. RECEIPTS										
OPERATING	263999.	263999.	263999.	263999.	263999.	263999.	263999.	263999.	263999.	263999.
CAPITAL	0.	0.	0.	0.	220.	0.	0.	96.	0.	4080.
BORROWING										
MID-TERM	8250.	0.	0.	0.	0.	8250.	0.	0.	0.	0.
LONG-TERM	153690.	0.	0.	0.	0.	0.	0.	0.	1440.	0.
TOTAL CASH INFLOW	425939.	263999.	263999.	263999.	264219.	272249.	263999.	264095.	265439.	268079.
2. EXPENDITURES										
CASH OPERATING EXNENSES	60061.	60061.	60061.	60061.	60061.	60061.	60061.	60061.	60061.	60061.
TOTAL FIXED EXPENSES	98407.	98407.	98407.	98407.	98407.	98407.	98407.	98407.	98407.	98407.
CAPITAL	215920.	0.	0.	0.	0.	11000.	0.	0.	1920.	0.
SCHEDULED DEBT PAYMENTS										
MID-TERM-INTEREST	1476.	1249.	975.	645.	246.	1476.	1249.	975.	645.	246.
LONG-TERM-INTEREST	25641.	24457.	23055.	21395.	19430.	17104.	14350.	11089.	7494.	2973.
MID-TERM-PRINCIPAL	1092.	1319.	1593.	1923.	2322.	1092.	1319.	1593.	1923.	2323.
LONG-TERM-PRINCIPAL	6439.	7623.	9025.	10685.	12650.	14976.	17730.	20990.	24586.	30423.
TOTAL DEBT-PAYMENT	34648.	34648.	34648.	34648.	34648.	34648.	34648.	34648.	34648.	35964.
TOTAL CASH OUTFLOW	409036.	193116.	193116.	193116.	193116.	204116.	193116.	193116.	195036.	194432.
3. FLOW OF FUNDS										
RECEIPT - EXPEND.	16904.	70884.	70884.	70884.	71104.	68134.	70884.	70980.	70404.	73647.
BEGIN CASH BALANCE	55980.	72857.	143740.	214623.	285505.	356608.	424741.	495623.	566602.	637005.
CASH AVAL. BEFORE BORR.	72857.	143740.	214623.	285505.	356608.	424741.	495623.	566602.	637005.	710651.
REPAY OPERATING LOAN										
INTEREST	26.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PRINCIPAL	753.	0.	0.	0.	0.	0.	0.	0.	0.	0.
BORR OPERATING LOAN	753.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ENDING CASH BALANCE	72857.	143740.	214623.	285505.	356608.	424741.	495623.	566602.	637005.	710651.
4. SUMMARY OF DEBT OUTSTANDING										
OPERATING	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MID-TERM	7158.	5838.	4246.	2323.	0.	7158.	5838.	4246.	2323.	0.
LONG-TERM	147251.	139627.	130602.	119916.	107266.	92290.	74560.	53569.	30423.	0.
TOTAL DEBT OUTSTANDING	154408.	145465.	134847.	122239.	107267.	99447.	80398.	57815.	32745.	0.

NET PRESENT VALUE OF INCOME STREAM BASED ON BEGINNING CASH OF $ 2000. AND INITAL DOWN PAYMENT OF $ 53980. FOR A PLANNING HORIZON OF 10 YEARS: $ 280076.

FACILITY SIZE OF SIXTEEN TANKS WITH OUTPUT OF 57600000 NAUPLI/MO.
INTEREST RATE IS DERIVED FROM 15% PLUS 5% PLUS 3% SURCHARGE,BANK OF A&M.
THE TANKS USED IN THE MATURATION ROOM ARE 12 FOOT IN DIAMETER.

AQUACULTURAL BUDGET SIMULATION SYSTEM
SIXTEEN TANK MATURATION/REPRODUCTION FACILITY AT CORPUS CHRISTI,TEXAS 1980.
BALANCE SHEET FOR DECEMBER 31, YEAR 1

---->FACILITY SIZE 10.00 12 FOOT DIAMETER TANKS

CURRENT ASSETS		CURRENT LIABILITIES	
CASH ON HAND	72857.	SHORT-TERM NOTE	0.
		MID-TERM NOTE	2568.
		LONG-TERM NOTE	32080.
TOTAL CURRENT ASSETS	72857.		
FIXED ASSETS		**FIXED LIABILITIES**	
VALUE OF CAPITAL ITEMS	215920.	MID-TERM NOTE(LESS CURRENT)	5838.
LESS DEPRECIATION	44880.	LONG-TERM NOTE(LESS CURRENT)	147251.
TOTAL FIXED ASSETS	171040.	TOTAL LIABILITIES	188490.
		NET WORTH (OWNER EQUITY)	55408.
		CHANGE FROM YEAR 0 NET WORTH	-572.
TOTAL ASSETS	243897.	TOTAL LIABILITIES + NET WORTH	243897.

FACILITY SIZE OF SIXTEEN TANKS WITH OUTPUT OF 57600000 NAUPLI/MO.
INTEREST RATE IS DERIVED FROM 15% PLUS 5% PLUS 3% SURCHARGE,BANK OF A&M.
THE TANKS USED IN THE MATURATION ROOM ARE 12 FOOT IN DIAMETER.

APPENDIX K

Output from FORTRAN program for vessels.

A GENERALIZED BUDGET SIMULATION

VESSEL BUDGET SIMULATION SYSTEM

WADE L. GRIFFIN, PROJECT DIRECTOR

LINDA A. JENSEN, CO-PRINCIPAL INVESTIGATOR

CHARLES M. ADAMS, CO-PRINCIPAL INVESTIGATOR

WITH

THOMAS L. LAURANT - UNIVERSITY OF MASSACHUSETTS

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FREDRICK J. SMITH - OREGON STATE UNIVERSITY

FUNDED BY: SEA GRANT NO. 04-8-M01-133
SEA GRANT PROGRAM
TEXAS A&M UNIVERSITY

DEPARTMENT OF AGRICULTURAL ECONOMICS
TEXAS AGRICULTURAL EXPERIMENT STATION
COLLEGE STATION, TEXAS 77843

VESSEL BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-M01-133
BUDGET INFORMATIONRMATION

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*****************************************************************************************
*                                                                                       *
*         THIS IS A SAMPLE DATA SET TO TEST THE                                         *
*         VESSEL BUDGET SIMULATION SYSTEM.                                              *
*         THIS VESSEL OPERATES OUT OF TEXAS. IT FISHES                                  *
*         COMERICALLY FOR SHRIMP AND ACTS AS A CHARTER                                  *
*         VESSEL ONE DAY A MONTH.                                                       *
*                                                                                       *
*****************************************************************************************
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VESSELS BUDGET SIMULATION SYSTEM
DETAILED ANNUAL BUDGET
TEST BUDGET
YEAR 1 IN THE PLANNING HORIZON

ENTRY DESCRIPTION	UNITS	UNIT PRICE	QUANTITY	COST OR VALUE
I. REVENUE:				
HALF DAY CHARTER	FARES	153.06	248.	37960.
SHRIMP	POUNDS	3.31	57330.	189935.
TOTAL REVENUE	POUNDS	1.00	227895.	227895.
II. VARIABLE COSTS:				
ICE	POUNDS	0.02	401338.	8027.
GROCERIES	DOLLARS	6.00	4284.	4284.
HAUL-OUT	HAUL-OUT	2600.00	1.	2600.
FUEL CONSUMPTION	GALLONS	0.90	75580.	68022.
OIL AND LUBRICATION	DOLLARS	1.00	600.	600.
OPTIONAL VAR. COST--HEADER	DOLLARS	1.00	600.	600.
REPAIRS				
HULL	DOLLARS	1.00	11880.	11880.
ENGINE	DOLLARS	1.00	1195.	1195.
ELECTRONICS	DOLLARS	1.00	742.	742.
NET REPAIR	DOLLARS	1.00	702.	702.
TOTAL REPAIRS	DOLLARS	1.00	15871.	15871.
REPLACEMENTS				
GEAR	DOLLARS	1.00	864.	864.
EQUIPMENT	DOLLARS	1.00	284.	284.
	DOLLARS	1.00	1400.	1400.
TOTAL REPLACEMENTS	DOLLARS	1.00	2548.	2548.
NET CREW SHARE	DOLLARS	1.00	15983.	15983.
NET CAPTAIN SHARE	DOLLARS	1.00	12726.	12726.
VARIABLE COST TOTAL	DOLLARS	1.00	131261.	131261.
III. FIX COST:				
OVERHEAD				
INSURANCE FEES FOR CREW AND HULL	DOLLARS	6700.00	1.	6700.
TOTAL OVERHEAD	DOLLARS	1.00	6700.	6700.
DEPRECIATION	DOLLARS	1.00	5892.	5892.
OPTIONAL FIXED COSTS				
OPTIONAL FIXED COST TEST	DOLLARS	100.00	2.	200.
TOTAL OPTIONAL FIXED COSTS	DOLLARS	1.00	200.	200.
MONTHLY OPTIONAL FIXED COSTS				
OPTIONAL MONTHLY FIXED COST TEST	DOLLARS	1.00	72.	72.
TOTAL MONTHLY OPTIONAL FIXED COSTS	DOLLARS	1.00	72.	72.
INSURANCE				
VESSEL INSURANCE, HULL	DOLLARS	1.00	3600.	3600.
INSURANCE	DOLLARS	1.00	3600.	3600.
PROPERTY TAX	DOLLARS	1.00	94.	94.

VESSELS BUDGET SIMULATION SYSTEM
SUMMARY ANNUAL BUDGET
TEST BUDGET
YEAR 1 IN THE PLANNING HORIZON

ENTRY DESCRIPTION	UNITS	UNIT PRICE	QUANTITY	COST OR VALUE
I. REVENUE:				
HALF DAY CHARTER	FARES	153.06	248.00	37960.00
SHRIMP	POUNDS	3.31	57330.00	189935.25
TOTAL REVENUE	POUNDS	1.00	227895.25	227895.25
II. VARIABLE COSTS:				
ICE	POUNDS	0.02	401337.87	8026.75
GROCERIES	DOLLARS	6.00	4284.00	4284.00
HAUL-OUT	HAUL-OUT	2600.00	1.00	2600.00
FUEL CONSUMPTION	GALLONS	0.90	75580.00	68021.94
OIL AND LUBRICATION	DOLLARS	1.00	600.00	600.00
OPTIONAL VAR. COST--HEADER	DOLLARS	1.00	600.00	600.00
TOTAL REPAIRS	DOLLARS	1.00	15870.52	15870.52
TOTAL REPLACEMENTS	DOLLARS	1.00	2548.00	2548.00
NET CREW SHARE	DOLLARS	1.00	15983.32	15983.32
NET CAPTAIN SHARE	DOLLARS	1.00	12726.49	12726.49
VARIABLE COST TOTAL	DOLLARS	1.00	131260.62	131260.62
III. FIX COST:				
TOTAL OVERHEAD	DOLLARS	1.00	6700.00	6700.00
DEPRECIATION	DOLLARS	1.00	5892.00	5892.00
TOTAL OPTIONAL FIXED COSTS	DOLLARS	1.00	200.00	200.00
TOTAL MONTHLY OPTIONAL FIXED COSTS	DOLLARS	1.00	72.00	72.00
INSURANCE	DOLLARS	1.00	3600.00	3600.00
PROPERTY TAX	DOLLARS	1.00	93.84	93.84

VESSELS BUDGET SIMULATION SYSTEM
TEST BUDGET

ANNUAL CASH FLOW
PAGE ONE

ITEM	END OF YEAR:	1	2	3	4	5	6	7	8
1.	CASH RECEIPTS:								
	PAYING PASSENGERS	37960.	37960.	37960.	37960.	37960.	37960.	37960.	37960.
	SHRIMP	189935.	189935.	189935.	189935.	189935.	189935.	189935.	189935.
	CAPITAL RECEIPTS	0.	0.	0.	0.	0.	0.	0.	0.
	CASH INFLOW FROM BORROWING	68000.	0.	0.	0.	0.	0.	0.	0.
	INITIAL DOWN PAYMENT	129748.	0.	0.	0.	0.	0.	0.	0.
	TOTAL CASH RECEIPTS	425643.	227895.	227895.	227895.	227895.	227895.	227895.	227895.
2.	CASH EXPENDITURES:								
	VARIABLE COST TOTAL	131261.	131261.	131261.	131261.	131261.	131261.	131261.	131261.
	TOTAL OVERHEAD	6700.	6700.	6700.	6700.	6700.	6700.	6700.	6700.
	CAPITAL REPLACEMENTS	95200.	0.	200.	0.	200.	0.	200.	0.
	TOTAL OPTIONAL FIXED COSTS	200.	200.	200.	200.	200.	200.	200.	200.
	TOTAL MONTHLY OPTIONAL FIXED COSTS	72.	72.	72.	72.	72.	72.	72.	72.
	INSURANCE	3600.	3600.	3600.	3600.	3600.	3600.	3600.	3600.
	PROPERTY TAX	94.	94.	94.	94.	94.	94.	94.	94.
	LOAN PAYMENTS:	13261.	13261.	13261.	13261.	13261.	13261.	13261.	13261.
	PRINCIPAL PORTION	5391.	6075.	6845.	7713.	8692.	9794.	11036.	12436.
	INTEREST PORTION	7870.	7186.	6416.	5547.	4569.	3467.	2225.	825.

VESSELS BUDGET SIMULATION SYSTEM
MONTHLY CASH FLOW
TEST BUDGET
YEAR 1 IN THE PLANNING HORIZON

ITEM DESCRIPTION	JAN	FEB	MAR	APR	MAY	JUNE
1. CASH RECEIPTS:						
PAYING PASSENGERS	1965.	2285.	3075.	3075.	3775.	4600.
SHRIMP	8841.	6931.	7557.	5369.	8671.	25509.
CAPITAL RECEIPTS	0.	0.	0.	0.	0.	0.
CASH INFLOW FROM BORROWING	68000.	0.	0.	0.	0.	0.
INITIAL DOWN PAYMENT	129748.	0.	0.	0.	0.	0.
TOTAL CASH RECEIPTS	208554.	9216.	10632.	8444.	12446.	30109.
2. CASH EXPENDITURES:						
VARIABLE COST TOTAL	8360.	5872.	6373.	5455.	7497.	18798.
INSURANCE FEES FOR CREW AND HULL	0.	0.	0.	0.	0.	0.
TOTAL OVERHEAD	0.	0.	0.	0.	0.	0.
CAPITAL REPLACEMENTS	95200.	0.	0.	0.	0.	0.
OPTIONAL FIXED COST TEST	0.	0.	0.	0.	0.	0.
TOTAL OPTIONAL FIXED COSTS	0.	0.	0.	0.	0.	0.
OPTIONAL MONTHLY FIXED COST TEST	6.	6.	6.	6.	6.	6.
TOTAL MONTHLY OPTIONAL FIXED COSTS	6.	6.	6.	6.	6.	6.
INSURANCE	0.	0.	900.	0.	0.	900.
PROPERTY TAX	0.	0.	0.	0.	0.	0.
INTEREST ON BORROWED CAPITAL	680.	676.	671.	667.	663.	658.
MEDIUM-TERM LOAN INTEREST	0.	0.	0.	0.	0.	0.
LONG-TERM LOAN INTEREST	680.	676.	671.	667.	663.	658.
PRINCIPAL ON BORROWED CAPITAL	425.	429.	434.	438.	442.	447.
MID-TERM LOAN PRINCIPAL	0.	0.	0.	0.	0.	0.
LONG-TERM LOAN PRINCIPAL	425.	429.	434.	438.	442.	447.

VESSELS BUDGET SIMULATION SYSTEM
MONTHLY CASH FLOW
TEST BUDGET
YEAR 1 IN THE PLANNING HORIZON

ITEM DESCRIPTION	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
1. CASH RECEIPTS:							
PAYING PASSENGERS	4600.	3825.	3075.	3075.	3075.	1535.	37960.
SHRIMP	34527.	26893.	23480.	21881.	12280.	7998.	189935.
CAPITAL RECEIPTS	0.	0.	0.	0.	0.	0.	0.
CASH INFLOW FROM BORROWING	0.	0.	0.	0.	0.	0.	68000.
INITIAL DOWN PAYMENT	0.	0.	0.	0.	0.	0.	68000.
TOTAL CASH RECEIPTS	39127.	30718.	26555.	24956.	15355.	9533.	425643.
2. CASH EXPENDITURES:							
VARIABLE COST TOTAL	20250.	15299.	13854.	13602.	8902.	7000.	131261.
INSURANCE FEES FOR CREW AND HULL	0.	0.	0.	0.	0.	6700.	6700.
TOTAL OVERHEAD	0.	0.	0.	0.	0.	6700.	6700.
CAPITAL REPLACEMENTS	0.	0.	0.	0.	0.	0.	95200.
OPTIONAL FIXED COST TEST	0.	0.	0.	0.	0.	200.	200.
TOTAL OPTIONAL FIXED COSTS	0.	0.	0.	0.	0.	200.	200.
OPTIONAL MONTHLY FIXED COST TEST	6.	6.	6.	6.	6.	6.	72.
TOTAL MONTHLY OPTIONAL FIXED COSTS	6.	6.	6.	6.	6.	6.	72.
INSURANCE	0.	0.	900.	0.	0.	900.	3600.
PROPERTY TAX	0.	0.	0.	0.	0.	94.	94.
INTEREST ON BORROWED CAPITAL	654.	649.	645.	640.	636.	631.	7870.
MEDIUM-TERM LOAN INTEREST	0.	0.	0.	0.	0.	0.	0.
LONG-TERM LOAN INTEREST	654.	649.	645.	640.	636.	631.	7870.
PRINCIPAL ON BORROWED CAPITAL	451.	456.	460.	465.	470.	474.	5391.
MID-TERM LOAN PRINCIPAL	0.	0.	0.	0.	0.	0.	0.
LONG-TERM LOAN PRINCIPAL	451.	456.	460.	465.	470.	474.	5391.

VESSELS BUDGET SIMULATION SYSTEM
COST PER UNIT OF EFFORT
TEST BUDGET
YEAR 1 IN THE PLANNING HORIZON

DESCRIPTION		NUMBER OF UNITS	TOTAL COSTS	COST PER UNIT
VARIABLE COST TOTAL	/ DAY FISHED	238	131261.	552.
VARIABLE COST TOTAL	/ 24 HOURS FISHED	199	131261.	660.

VESSELS BUDGET SIMULATION SYSTEM
SHARE STATEMENT FOR CAPTAIN
TEST BUDGET
YEAR 1 IN THE PLANNING HORIZON

DESCRIPTION OF SHARE DISTRIBUTION	SHARE %	CASH VALUE
GROSS SHARE	0.15	28490.31
EXPENSES FROM VESSEL:		
ICE	0.15	1204.01
GROCERIES	0.33	1413.72
FUEL CONSUMPTION	0.15	10203.28
OIL AND LUBRICATION	0.15	90.00
OPTIONAL VAR. COST--HEADER	0.15	90.00
TOTAL REPAIRS	0.15	731.70
TOTAL REPLACEMENTS	0.15	210.00
NET CAPTAIN SHARE	0.03	12726.49

VESSELS BUDGET SIMULATION SYSTEM
SHARE STATEMENT FOR THE CREW
TEST BUDGET
YEAR 1 IN THE PLANNING HORIZON

DESCRIPTION OF SHARE DISTRIBUTION	SHARE %	CASH VALUE
GROSS SHARE	0.20	37987.08
EXPENSES FROM VESSEL:		
ICE	0.20	1605.35
GROCERIES	0.67	2870.28
FUEL CONSUMPTION	0.20	13604.37
OIL AND LUBRICATION	0.20	120.00
OPTIONAL VAR. COST--HEADER	0.20	120.00
TOTAL REPAIRS	0.20	975.60
TOTAL REPLACEMENTS	0.20	280.00
NET CREW SHARE	0.04	15983.32

VESSEL BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-M01-133
VARIABLE INPUTBY MONTH IN UNITS

ITEM DESCRIPTION	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	YEAR TOTAL
POUNDS OF ICE	14523.60	12348.00	12495.00	10500.00	16846.20	61040.00	80875.19	55776.00	48598.20	43411.20	27049.40	17875.20	401337.87
GROCERIES IN CREW DAYS	45	42	42	42	51	84	87	66	66	75	54	60	714
WOODEN HAUL-OUT	0	0	0	0	0	1	0	0	0	0	0	0	1
GALLONS OF FUEL	4680.0	4480.0	4880.0	4680.0	5800.0	8840.0	9820.0	7040.0	6860.0	7320.0	5800.0	5380.0	75580.0
GALLONS OF FUEL, AUXILIARY ENGINE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL GALLONS OF FUEL	4680.0	4480.0	4880.0	4680.0	5800.0	8840.0	9820.0	7040.0	6860.0	7320.0	5800.0	5380.0	75580.0
OIL AND LUBRICATION	20.00	40.00	40.00	40.00	40.00	80.00	80.00	60.00	40.00	60.00	60.00	40.00	600.00
OPTIONAL VAR. COST--HEADER	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	600.00
REPAIRS:													
68' WOODEN GULF SHRIMP TRAWLER-12YRS OLD BRMN	633.60	595.20	627.20	627.20	774.40	1228.80	1267.20	966.40	934.40	1049.60	780.80	793.60	11879.99
CAT 343 DIESEL 6:1 REDUCTION	58.50	56.00	61.00	58.50	72.50	110.50	122.75	88.00	85.75	91.50	72.50	67.25	1194.75
PETTY AUX. ENGINE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10

CONTINUED

SAMPLE FOOTNOTE
FOR
TESTING PURPOSES

VESSEL BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-M01-133
VARIABLE INPUTBY MONTH IN UNITS

ITEM DESCRIPTION ---CONTINUED---	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	YEAR TOTAL
SONAR W/RECORDER	39.60	37.20	39.20	39.20	48.40	76.80	79.20	60.40	58.40	65.60	48.80	49.60	742.50
65' FLAT NET	38.70	36.00	37.50	36.00	45.30	74.40	83.70	57.30	58.20	63.60	47.70	48.60	702.00
OPTIONAL INVENTORY TEST ITEM	210.00	208.00	238.00	228.00	278.00	388.00	424.00	322.00	298.00	308.00	262.00	214.00	4878.00
REPAIR TOTAL	980.40	932.40	1002.90	988.90	1218.60	1878.50	1976.85	1494.10	1434.75	1578.30	1211.80	1173.05	15870.52
REPLACEMENTS:													
WASH DOWN HOSE	34.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34.00
BLOCKS 12"	250.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	250.00
MAIN CABLE 5/8" @ 72-FOOT 1200 FEET	864.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	864.00
65' FLAT NET	1400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1400.00
REPLACEMENT TOTAL	2548.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2548.00
CREW SHARE	-32.85	157.14	195.65	-195.28	156.08	2526.97	4043.09	3302.11	2696.44	2245.84	822.27	65.87	15983.32
CAPTAIN SHARE	21.94	161.32	190.21	-102.99	169.85	1982.17	3122.36	2544.90	2090.64	1762.01	672.59	111.51	12726.49

SAMPLE FOOTNOTE
FOR
TESTING PURPOSES

VESSEL BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-M01-133
VARIABLE INPUTCOST BY MONTH IN DOLLARS

ITEM DESCRIPTION	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	YEAR TOTAL
COST OF ICE	290.47	246.96	249.90	210.00	336.92	1220.80	1617.50	1115.52	971.96	868.22	540.99	357.50	8026.75
GROCERIES	270.00	252.00	252.00	252.00	306.00	504.00	522.00	396.00	396.00	450.00	324.00	360.00	4284.00
WOODEN HAUL-OUT	0	0	0	0	0	2600	0	0	0	0	0	0	2600
FUEL COST	4212.00	4032.00	4392.00	4212.00	5220.00	7956.00	8838.00	6336.00	6174.00	6588.00	5220.00	4842.00	68021.94
FUEL COST, AUXILIARY ENGINE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL FUEL COST	4212.00	4032.00	4392.00	4212.00	5220.00	7956.00	8838.00	6336.00	6174.00	6588.00	5220.00	4842.00	68021.94
OIL AND LUBRICATION	20.00	40.00	40.00	40.00	40.00	80.00	80.00	60.00	40.00	60.00	60.00	40.00	600.00
OPTIONAL VAR. COST--HEADER	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	600.00
REPAIRS:													
68' WOODEN GULF SHRIMP TRAWLER-12YRS OLD BRMN	633.60	595.20	627.20	627.20	774.40	1228.80	1267.20	966.40	934.40	1049.60	780.80	793.60	11879.99
CAT 343 DIESEL 6:1 REDUCTION	58.50	56.00	61.00	58.50	72.50	110.50	122.75	88.00	85.75	91.50	72.50	67.25	1194.75
PETTY AUX. ENGINE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10

CONTINUED

SAMPLE FOOTNOTE
FOR
TESTING PURPOSES

VESSEL BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-MO1-133
VARIABLE INPUTCOST BY MONTH IN DOLLARS

ITEM DESCRIPTION ---CONTINUED---	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	YEAR TOTAL
SONAR W/RECORDER	39.60	37.20	39.20	39.20	48.40	76.80	79.20	60.40	58.40	65.60	48.80	49.60	742.50
65' FLAT NET	38.70	36.00	37.50	36.00	45.30	74.40	83.70	57.30	58.20	63.60	47.70	48.60	702.00
OPTIONAL INVENTORY TEST ITEM	210.00	208.00	238.00	228.00	278.00	388.00	424.00	322.00	298.00	308.00	262.00	214.00	4878.00
REPAIR TOTAL	980.40	932.40	1002.90	988.90	1218.60	1878.50	1976.85	1494.10	1434.75	1578.30	1211.80	1173.05	15870.52
REPLACEMENTS:													
WASH DOWN HOSE	34.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34.00
BLOCKS 12"	250.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	250.00
MAIN CABLE 5/8" @ 72-FOOT 1200 FEET	864.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	864.00
65' FLAT NET	1400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1400.00
REPLACEMENT TOTAL	2548.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2548.00
CREW SHARE	-32.85	157.14	195.65	-195.28	156.08	2526.97	4043.09	3302.11	2696.44	2245.84	822.27	65.87	15983.32
CAPTAIN SHARE	21.94	161.32	190.21	-102.99	169.85	1982.17	3122.36	2544.90	2090.64	1762.01	672.59	111.51	12726.49
TOTAL VARIABLE COST	8359.94	5871.80	6372.63	5454.61	7497.43	18798.41	20249.78	15298.61	13853.78	13602.35	8901.61	6999.91	131260.62

SAMPLE FOOTNOTE

FOR
TESTING PURPOSES

VESSEL BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-M01-133
VARIABLE INPUTANNUAL SUMMARY OF COST AND UNITS

ITEM DESCRIPTION	UNITS	PRICE/UNIT	COST
ICE	401338.	0.02	8026.75
GROCERIES	714	6.00	4284.00
WOODEN HAUL-OUT	1	2600	2600
FUEL CONSUMPTION	75580.0	0.90	68021.94
FUEL CONSUMPTION, AUXILIARY ENGINE	0.0	0.90	0.0
TOTAL FUEL CONSUMPTION	75580.0	0.90	68021.94
OIL AND LUBRICATION COST	600.00	$1.00	600.00
OPTIONAL VAR. COST--HEADER	600.00	$1.00	600.00
REPAIRS:			
68' WOODEN GULF SHRIMP TRAWLER-12YRS OLD BRMN	11879.99	$1.00	11879.99
CAT 343 DIESEL 6:1 REDUCTION	1194.75	$1.00	1194.75
PETTY AUX. ENGINE	0.10	$1.00	0.10
SONAR W/RECORDER	742.50	$1.00	742.50
65' FLAT NET	702.00	$1.00	702.00
OPTIONAL INVENTORY TEST ITEM	4878.00	$1.00	4878.00
REPAIR TOTAL	15870.52	$1.00	15870.52

CONTINUED

SAMPLE FOOTNOTE
FOR
TESTING PURPOSES

VESSEL BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-M01-133
VARIABLE INPUTANNUAL SUMMARY OF COST AND UNITS

ITEM DESCRIPTION ---CONTINUED---	UNITS	PRICE/UNIT	COST
REPLACEMENTS:			
WASH DOWN HOSE	34.00	$1.00	34.00
BLOCKS 12"	250.00	$1.00	250.00
MAIN CABLE 5/8" @ 72-FOOT 1200 FEET	864.00	$1.00	864.00
65' FLAT NET	1400.00	$1.00	1400.00
REPLACEMENT TOTAL	2548.00	$1.00	2548.00
CREW SHARE	15983.32	$1.00	15983.32
CAPTAIN SHARE	12726.49	$1.00	12726.49
TOTAL VARIABLE COST			131260.62

SAMPLE FOOTNOTE
FOR
TESTING PURPOSES

VESSEL BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-M01-133
VARIABLE INPUTSUMMARY OF VARIABLE COST

ITEM DESCRIPTION	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	YEAR TOTAL
COST OF ICE	290.47	246.96	249.90	210.00	336.92	1220.80	1617.50	1115.52	971.96	868.22	540.99	357.50	8026.75
GROCERIES	270.00	252.00	252.00	252.00	306.00	504.00	522.00	396.00	396.00	450.00	324.00	360.00	4284.00
WOODEN HAUL-OUT	0	0	0	0	0	2600	0	0	0	0	0	0	2600
TOTAL FUEL COST	4212.00	4032.00	4392.00	4212.00	5220.00	7956.00	8838.00	6336.00	6174.00	6588.00	5220.00	4842.00	68021.94
OIL AND LUBRICATION	20.00	40.00	40.00	40.00	40.00	80.00	80.00	60.00	40.00	60.00	60.00	40.00	600.00
OPTIONAL VAR. COST--HEADER	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	600.00
REPAIRS:													
HULL	633.60	595.20	627.20	627.20	774.40	1228.80	1267.20	966.40	934.40	1049.60	780.80	793.60	11879.99

-----CONTINUED-----

SAMPLE FOOTNOTE
FOR
TESTING PURPOSES

VESSEL BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-M01-133
VARIABLE INPUTSUMMARY OF VARIABLE COST

ITEM DESCRIPTION	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	YEAR TOTAL
ENGINE	58.50	56.00	61.00	58.50	72.50	110.50	122.75	88.00	85.75	91.50	72.50	67.25	1194.85
ELECTRONICS	39.60	37.20	39.20	39.20	48.40	76.80	79.20	60.40	58.40	65.60	48.80	49.60	742.50
NET REPAIR	38.70	36.00	37.50	36.00	45.30	74.40	83.70	57.30	58.20	63.60	47.70	48.60	702.00
REPAIR TOTAL	980.40	932.40	1002.90	988.90	1218.60	1878.50	1976.85	1494.10	1434.75	1578.30	1211.80	1173.05	15870.52
REPLACEMENTS:													
GEAR	864.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	864.00
EQUIPMENT	284.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	284.00
	1400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1400.00
REPLACEMENT TOTAL	2548.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2548.00
CREW SHARE	-32.85	157.14	195.65	-195.28	156.08	2526.97	4043.09	3302.11	2696.44	2245.84	822.27	65.87	15983.32
CAPTAIN SHARE	21.94	161.32	190.21	-102.99	169.85	1982.17	3122.36	2544.90	2090.64	1762.01	672.59	111.51	12726.49
TOTAL VARIABLE COST	8359.94	5871.80	6372.63	5454.61	7497.43	18798.41	20249.78	15298.61	13853.78	13602.35	8901.61	6999.91	131260.62

SAMPLE FOOTNOTE
FOR
TESTING PURPOSES

VESSEL BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-M01-133
INITIAL CAPITAL INVESTMENT DESCRIPTION

ITEM DESCRIPTION		INVESTMENT TYPE: CAPITAL	INVESTMENT TYPE: OPERATING	QUANTITY	UNIT PRICE	TOTAL COST: UNITS * PRICE
HULLS:						
68' WOODEN GULF SHRIMP TRAWLER-12YRS OLD	BRMN	X		1	60000.00	60000.00
TOTAL						60000.00
ENGINES:						
CAT 343 DIESEL 6:1 REDUCTION		X		1	20000.00	20000.00
PETTY AUX. ENGINE		X		2	2500.00	5000.00
TOTAL						25000.00
EQUIPMENT:						
WASH DOWN HOSE			X	2	17.00	34.00
BLOCKS 12"			X	1	250.00	250.00
SONAR W/RECORDER		X		1	10000.00	10000.00
TOTAL						10284.00
GEARS:						
MAIN CABLE 5/8" @ 72-FOOT 1200 FEET			X	1	864.00	864.00
65' FLAT NET			X	2	700.00	1400.00
TOTAL						2264.00
OPTIONAL INVENTORY ITEMS:						

CONTINUED

SAMPLE FOOTNOTE
FOR
TESTING PURPOSES

VESSEL BUDGET SIMULATION SYSTEM
SEA GRANT NO. 04-8-M01-133
INITIAL CAPITAL INVESTMENT DESCRIPTION

ITEM DESCRIPTION	INVESTMENT TYPE: CAPITAL	INVESTMENT TYPE: OPERATING	QUANTITY	UNIT PRICE	TOTAL COST: UNITS * PRICE
GEARS:					
OPTIONAL INVENTORY TEST ITEM	X		2	100.00	200.00
TOTAL					200.00

TOTAL COST OF VESSEL & PHYSICAL EQUIPMENT		97748.00
TOTAL CAPITAL INVESTMENT (DEPRECIABLE)	= 95200.00	
TOTAL OPERATING INVESTMENT (NON DEPRECIABLE)	= 2548.00	

SAMPLE FOOTNOTE
FOR
TESTING PURPOSES