PROGRAM TITLE:	MINUTEMAN PROPOSAL MANPOWER FORECAST
CLASSIFICATION:	General
AUTHOR:	Young J. Lee Autonetics
PURPOSE:	To accumulate manpower forecasts of several divisions, or departments, into one consolidated proposal forecast as part of the explanation of the sales proposal.
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1.   **PURPOSE**

To accumulate manpower forecasts of several
divisions, or departments, into one consolidated
proposal forecast as part of the explanation of
the sales proposal.

2.   **METHOD**

Manpower forecasts in man-months are entered
on the typewriter consecutively, month by month
and category by category, for each division
(department), and/or data can be entered by
punched tape. The program accumulates and
types out the data in a standard format, and/or
punches out the data on tape.

3.   **USE**

3.1   Preparation: Set typewriter tab override switch
in tab position (toward ribbon). Set left hand
margin at 10; right hand margin to 100; tabs at
33 and 75.

(1) Typewriter input -- Sense switch B and C
off.

(2) Tape input -- Sense switch B on and C off .

(3) Typewriter and tape input -- Sense switch
B and C on.

NOTE: When sense switches B and C are on, it
will be assumed that there are typewriter and tape
inputs for every task. However, if there should
be no typewriter input for a certain task, input "1"
after "DIV. TYPE" and input "0" for all categories.
If there is no tape input for a certain task, input
"1" after "DIV. TAPE" and press start after com-
puter halts at location 74410 and continue the
program.

3.2   Data Entry

(1) Press start 1.

(2) Typewriter will type out "TITLE" and shift to tab 33. Type the portion of the center heading (to a maximum of three lines) which is to appear on each page after "PRICE ESTIMATE DATA FOR" and suitably space the start of each line for page centering. (Tab location number 51 equals heading center). Strike the blank key slowly until carriage return.

(3) * Typewriter will type out "TASK". Enter the number of tasks, strike the space bar, and typewriter will carriage return.

(4) Typewriter will type out "TASK NO.". Type the task heading (example 1: "1- DESIGN AND DEVELOPMENT"). Strike the blank key slowly until carriage return.

(5)* Typewriter will type out "DIV". Enter the number of divisions. Strike the space bar, and typewriter will carriage return.

NOTES: If the sense switches B and C are on, i.e., typewriter and tape input, "DIV. TYPE" will be typed out. Enter the number of divisions to be input by the typewriter, strike the space bar, and typewriter will carriage return. Typewriter will type out "DIV. TAPE". Enter the number of divisions to be input by the tape, strike the space bar, and typewriter will carriage return.

A division using this program can enter the number of its participating departments here and continue the balance of this program to enter data for its departments to prepare the division's proposal forecast.

(6)* Typewriter will type out "FROM". Enter the number of the year in which the forecast starts, strike the space bar, enter the number of the beginning month, strike the space bar (example: "1961 7" for July 1961), and typewriter will carriage return.

*Error correction: If error is made when entering numeric input data, strike the "X" key before striking the space bar, then computer will halt. Press Start key, enter the correct number, strike the space bar, and continue the program.

(7)* Typewriter will type out "TO". Enter the number of the year in which the forecast ends, strike the space bar, enter the number of the ending month, strike the space bar, and typewriter will carriage return.

NOTES:

a. Typewriter input: Follow steps 8 through 14.

b. Tape input: At this point, computer will halt at location 74410. Read a tape in (load a tape and press "FILL" button) and when computer stops, repeat until all tapes are read in.

c. Typewriter and tape input: Enter typewriter input first then tape input.

(8)* The typewriter will type out:

"ENGINEERING
CATEGORY I"

    a. If there is no data for this category, enter zero and strike the space bar.

    b. If there are data, enter 1 and a carriage return; then (1) enter the first month's data, (2) strike the space bar, and repeat (1) and (2) until data for all months are entered.

NOTE: Although the typewriter will carriage return after 10 data inputs, program will accept input for 60 months.

(9)* Typewriter will type out:

"CATEGORY II"

Enter data following steps 8a or 8b.

(10)* Typewriter will type out:

"LOGISTICS &
    PUBLICATION"

Enter data following steps 8a and 8b.

(11)* Typewriter will type out:

"SHOP SUPPORT"

Enter data following steps 8a and 8b.

(12)* Typewriter will type out:

"FACTORY"

Enter data following steps 8a and 8b.

(13)* Typewriter will type out:

"Q. R. A. "

Enter data following steps 8a and 8b.

(14)* Typewriter will type out:

"TOOLING"

Enter data following steps 8a or 8b.

3.2.1   This process of data entries (paragraph 8 through 14) will be repeated as many times as the number of divisions (departments) entered under paragraph 5.

3.3   TASK DATA PUNCH OUT OR TYPE OUT:

After all the inputs for the Task have been made, the computer will halt at location 13440.

NOTE: If a tape is desired of the accumulated data for each task, at this point press Start 2 and the computer will punch out a tape and halt again at 13440.

3.3.1   Insert typing paper (bond or ditto master),
aligning the top of the paper with the "line finder"
on the typewriter, then press start key. The
typewriter will type out the entire task forecast,
6 months per page, halting at the end of each
page awaiting insertion of new page. After
pressing the start key, page headings and task
description will be repeated and data type out
will continue until task completion at which
point totals will be typed. The computer will
halt at location 17070.

3.4   Repeat data for next task

Press Start key. Repeat steps described in
paragraphs 4, 5, and 8 through 14, (see
notes under paragraph 7--------), task by
task, until all tasks are complete.

3.5   Summary Type Out

After all tasks have been completed, the com-
puter will halt at location 13440. Insert paper,
press start, and the computer will type out the
summary of all tasks, halting at location 00010.
If a tape of the summary is desired. press
start 2.

3.5.1   ALTERNATE

If at this point it is desired to add the summary
manpower forecast of another proposal to the
summary in the computer, punch on the computer
keyboard L04470 (to eliminate steps described in
paragraphs 1 through 7 above), hit the enter key
and press the start button. The typewriter will
type out:

         "ENGINEERING
          CATEGORY I"

3.5.1   (Continued)

Enter the new data (proposal summary) as indicated
in paragraphs 8 through 14.   To eliminate the task
type out of the new data, enter on the keyboard
L03261, hit the enter key, press the start button,
and the grand summary will type out.

4.   SUBROUTINES USED

AN-002   Decimal Input
AN-016   Decimal Output
AN-051   Alphabetic Output
AN-049   Alphabetic Input
#56.B   Alphanumeric Memory Dump

*Error Correction: If error is made when entering numeric input
            data, strike the "X" key before striking the space
            bar, then computer will halt.   Press Start key,
            enter the correct number, strike the space bar,
            and continue the program.

PRICE ESTIMATE DATA
FOR
AEROSPACE PHOTRONIC READER EQUIPMENT
L/C DESIGNATED SUPPLEMENTAL AGREEMENT NO.2
TO L/C AFO4(AOK)-OOF

MANPOWER FORECAST IN MAN MONTHS

TASK NO.1 - DESIGN AND DEVELOPMENT

	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.
ENGINEERING						
CATEGORY I	600.0	800.0	1200.0	2400.0	2400.0	2400.0
CATEGORY II	220.0	320.0	600.0	1000.0	1580.0	2400.0
LOGISTICS & PUBLICATION	1.5	1.5	1.5	1.5	1.5	1.5
SUBTOTAL	821.5	1121.5	1801.5	3401.5	3981.5	4801.5
CUMULATIVE	821.5	1943.0	3744.5	7146.0	11127.5	15929.0
SHOP SUPPORT	.0	.0	.0	100.0	100.0	130.0
SUBTOTAL	.0	.0	.0	100.0	100.0	130.0
CUMULATIVE	.0	.0	.0	100.0	200.0	330.0
GRAND TOTAL	821.5	1121.5	1801.5	3501.5	4081.5	4931.5
CUMULATIVE	821.5	1943.0	3744.5	7246.0	11327.5	16259.0

PRICE ESTIMATE DATA
FOR
AEROSPACE PHOTRONIC READER EQUIPMENT
L/C DESIGNATED SUPPLEMENTAL AGREEMENT NO.2
TO L/C AFO4 (AOK)-OOF

MANPOWER FORECAST IN MAN MONTHS

TASK NO.1 - DESIGN AND DEVELOPMENT

	JAN.	FEB.	MAR.	APR.	MAY.	JUN.
ENGINEERING						
CATEGORY I	2100.0	1800.0	1500.0	1500.0	1200.0	1200.0
CATEGORY II	4000.0	4800.0	5200.0	5200.0	5200.0	4000.0
LOGISTICS & PUBLICATION	1.5	30.0	60.0	150.0	150.0	195.0
SUBTOTAL	6101.5	6630.0	6760.0	6850.0	6550.0	5395.0
CUMULATIVE	22030.5	28660.5	35420.5	42270.5	48820.5	54215.5
SHOP SUPPORT	150.0	160.0	200.0	200.0	200.0	100.0
SUBTOTAL	150.0	160.0	200.0	200.0	200.0	100.0
CUMULATIVE	480.0	640.0	840.0	1040.0	1240.0	1340.0
GRAND TOTAL	6251.5	6790.0	6960.0	7050.0	6750.0	5495.0
CUMULATIVE	22510.5	29300.5	36260.5	43310.5	50060.5	55555.5

PRICE ESTIMATE DATA
FOR
AEROSPACE PHOTRONIC READER EQUIPMENT
L/C DESIGNATED SUPPLEMENTAL AGREEMENT NO.2
TO L/C AF04(AOK)-OOF

MANPOWER FORECAST IN MAN MONTHS

TASK NO.1 - DESIGN AND DEVELOPMENT

	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL
ENGINEERING							
CATEGORY I	1050.0	825.0	610.0	165.0	45.0	15.0	21810.0
CATEGORY II	3200.0	2800.0	2000.0	800.0	600.0	200.0	44120.0
LOGISTICS & PUBLICATION	195.0	195.0	135.0	66.0	36.0	15.0	1237.5
SUBTOTAL	4445.0	3820.0	2745.0	1031.0	681.0	230.0	67167.5
CUMULATIVE	58660.5	62480.5	65225.5	66256.5	66937.5	67167.5	
SHOP SUPPORT	90.0	40.0	10.0	10.0	.0	.0	1490.0
SUBTOTAL	90.0	40.0	10.0	10.0	.0	.0	1490.0
CUMULATIVE	1430.0	1470.0	1480.0	1490.0	1490.0	1490.0	
GRAND TOTAL	4535.0	3860.0	2755.0	1041.0	681.0	230.0	68657.5
CUMULATIVE	60090.5	63950.5	66705.5	67746.5	68427.5	68657.5	

TASK NO.

AUTONETICS. DIVISION OF
NORTH AMERICAN AVIATION, INC.
DOWNEY, CALIFORNIA

PRICE ESTIMATE DATA
FOR
AEROSPACE PHOTRONIC READER EQUIPMENT
L/C DESIGNATED SUPPLEMENTAL AGREEMENT NO.2
TO L/C AFO4(AOK)-OOF

MANPOWER FORECAST IN MAN MONTHS

TASK NO.2 - PROGRAM PLAN

	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL
ENGINEERING							
CATEGORY I	25.0	40.0	45.0	50.0	10.0	5.0	175.0
CATEGOY II 9	.0	.0	10.0	5.0	5.0	2.0	22.0
SUBTOTAL	25.0	40.0	55.0	55.0	15.0	7.0	197.0
CUMULATIVE	25.0	65.0	120.0	175.0	190.0	197.0	
GRAND TOTAL	25.0	40.0	55.0	55.0	15.0	7.0	197.0
CUMULATIVE	25.0	65.0	120.0	175.0	190.0	197.0	

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PRICE ESTIMATE DATA
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AEROSPACE PHOTRONIC READER EQUIPMENT
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TO L/C AFO4(AOK)-OOF

MANPOWER FORECAST IN MAN MONTHS

TASK NO.3 - PROTOTYPE FABRICATION

	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.
ENGINEERING						
CATEGORY II	.0	.0	.0	.0	.0	20.0
SUBTOTAL	.0	.0	.0	.0	.0	20.0
CUMULATIVE	.0	.0	.0	.0	.0	20.0
FACTORY	.0	.0	.0	.0	.0	448.0
Q.R.A.	.0	.0	.0	.0	.0	20.0
TOOLING	.0	.0	.0	.0	220.0	280.0
SUBTOTAL	.0	.0	.0	.0	220.0	748.0
CUMULATIVE	.0	.0	.0	.0	220.0	968.0
GRAND TOTAL	.0	.0	.0	.0	220.0	768.0
CUMULATIVE	.0	.0	.0	.0	220.0	988.0

AUTONETICS. DIVISION OF
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PRICE ESTIMATE DATA
FOR
AEROSPACE PHOTRONIC READER EQUIPMENT
L/C DESIGNATED SUPPLEMENTAL AGREEMENT NO.?
TO L/C AF04(AOK)-OOF

MANPOWER FORECAST IN MAN MONTHS

TASK NO.? - PROTOTYPE FABRICATION

	JAN.	FEB.	MAR.	APR.	MAY.	JUN.
ENGINEERING						
CATEGORY II	40.0	40.0	40.0	40.0	40.0	40.0
SUBTOTAL	40.0	40.0	40.0	40.0	40.0	40.0
CUMULATIVE	60.0	100.0	140.0	180.0	??0.0	?60.0
FACTORY	9?0.0	14?0.0	?600.0	?600.0	?600.0	?100.0
Q.R.A.	??.0	?4.0	?4.0	?8.0	60.0	60.0
TOOLING	6?0.0	844.0	13??.0	5?4.0	180.0	180.0
SUBTOTAL	156?.0	??88.0	3946.0	?15?.0	?840.0	?340.0
CUMULATIVE	?530.0	4818.0	8764.0	11916.0	14756.0	17096.0
GRAND TOTAL	160?.0	??38.0	?986.0	?19?.0	?880.0	?380.0
CUMULATIVE	?590.0	4918.0	8904.0	1?096.0	14976.0	17?56.0

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MANPOWER FORECAST IN MAN MONTHS

TASK NO.2 - PROTOTYPE FABRICATION

	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL
ENGINEERING							
CATEGORY II	40.0	40.0	40.0	40.0	20.0	20.0	460.0
SUBTOTAL	40.0	40.0	40.0	40.0	20.0	20.0	460.0
CUMULATIVE	200.0	240.0	280.0	420.0	440.0	460.0	
FACTORY	1820.0	1820.0	1820.0	848.0	800.0	560.0	20356.0
Q.R.A.	60.0	40.0	40.0	20.0	.0	.0	398.0
TOOLING	180.0	180.0	100.0	100.0	20.0	.0	4750.0
SUBTOTAL	2060.0	2040.0	1960.0	968.0	820.0	560.0	25504.0
CUMULATIVE	19156.0	21196.0	23156.0	24124.0	24944.0	25504.0	
GRAND TOTAL	2100.0	2080.0	2000.0	1008.0	840.0	580.0	25964.0
CUMULATIVE	19456.0	21536.0	23536.0	24544.0	25384.0	25964.0	

PRICE ESTIMATE DATA
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AEROSPACE PHOTRONIC READER EQUIPMENT
L/C DESIGNATED SUPPLEMENTAL AGREEMENT NO.2
TO L/C AFO4(AOK)-OOF

MANPOWER FORECAST IN MAN MONTHS

SUMMARY

	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.
ENGINEERING						
CATEGORY I	600.0	800.0	1200.0	2400.0	2400.0	2400.0
CATEGORY II	220.0	320.0	600.0	1000.0	1580.0	2420.0
LOGISTICS & PUBLICATION	1.5	1.5	1.5	1.5	1.5	1.5
SUBTOTAL	821.5	1121.5	1801.5	3401.5	3981.5	4821.5
CUMULATIVE	821.5	1943.0	3744.5	7146.0	11127.5	15949.0
SHOP SUPPORT	.0	.0	.0	100.0	100.0	130.0
FACTORY	.0	.0	.0	.0	.0	448.0
Q.R.A.	.0	.0	.0	.0	.0	20.0
TOOLING	.0	.0	.0	.0	220.0	280.0
SUBTOTAL	.0	.0	.0	100.0	320.0	878.0
CUMULATIVE	.0	.0	.0	100.0	420.0	1298.0
GRAND TOTAL	821.5	1121.5	1801.5	3501.5	4301.5	5699.5
CUMULATIVE	821.5	1943.0	3744.5	7246.0	11547.5	17247.0

AUTONETICS. DIVISION OF
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PRICE ESTIMATE DATA
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TO L/C AFO4(AOK)-OOF

MANPOWER FORECAST IN MAN MONTHS

SUMMARY

	JAN.	FEB.	MAR.	APR.	MAY.	JUN.
ENGINEERING						
CATEGORY I	2100.	1800.0	1500.0	1500.0	1200.0	1200.0
CATEGORY II	4040.0	4840.0	5240.0	5240.0	5240.0	4040.0
LOGISTICS & PUBLICATION	1.5	30.0	60.0	150.0	150.0	195.0
SUBTOTAL	6141.5	6670.0	6800.0	6890.0	6590.0	5435.0
CUMULATIVE	22090.5	28760.5	35560.5	42450.5	49040.5	54475.5
SHOP SUPPORT	150.0	160.0	200.0	200.0	200.0	100.0
FACTORY	920.0	1420.0	2600.0	2600.0	2600.0	2100.0
Q.R.A.	22.0	24.0	24.0	28.0	60.0	60.0
TOOLING	620.0	844.0	1322.0	524.0	180.0	180.0
SUBTOTAL	1712.0	2448.0	4146.0	3352.0	3040.0	2440.0
CUMULATIVE	3010.0	5458.0	9604.0	12956.0	15996.0	18436.0
GRAND TOTAL	7853.5	9118.0	10946.0	10242.0	9630.0	7875.0
CUMULATIVE	25100.5	34218.5	45164.5	55406.5	65036.5	72911.5

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MANPOWER FORECAST IN MAN MONTHS

SUMMARY

	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL
ENGINEERING							
CATEGORY I	1075.0	865.0	655.0	215.0	55.0	20.0	21985.0
CATEGORY II	3240.0	2840.0	2050.0	845.0	625.0	222.0	44602.0
LOGISTICS & PUBLICATION	195.0	195.0	135.0	66.0	36.0	15.0	1237.5
SUBTOTAL	4510.0	3900.0	2840.0	1126.0	716.0	257.0	67824.5
CUMULATIVE	58985.5	62885.5	65725.5	66851.5	67567.5	67824.5	
SHOP SUPPORT	90.0	40.0	10.0	10.0	.0	.0	1490.0
FACTORY	1820.0	1820.0	1820.0	848.0	800.0	560.0	20356.0
Q.R.A.	60.0	40.0	40.0	20.0	.0	.0	398.0
TOOLING	180.0	180.0	100.0	100.0	20.0	.0	4750.0
SUBTOTAL	2150.0	2080.0	1970.0	978.0	820.0	560.0	26994.0
CUMULATIVE	20586.0	22666.0	24636.0	25614.0	26434.0	26994.0	
GRAND TOTAL	6660.0	5980.0	4810.0	2104.0	1536.0	817.0	94818.5
CUMULATIVE	79571.5	85551.5	90361.5	92465.5	94001.5	94818.5	