

Charles W. Adams Associates, Inc.
Bedford, Massachusetts

CHARLES W. ADAMS ASSOCIATES, INC.
AND SUBSIDIARY

FINANCIAL STATEMENTS IN CONSOLIDATION

July 31, 1963

LYBRAND, ROSS BROS. & MONTGOMERY

BOSTON OFFICE

LYBRAND, ROSS BROS. & MONTGOMERY

ACCOUNTANTS AND AUDITORS

COOPERS & LYBRAND
IN AREAS OF THE WORLD
OUTSIDE THE UNITED STATES

Charles W. Adams Associates, Inc.
Bedford, Massachusetts

We have examined the consolidated statement of financial position of Charles W. Adams Associates, Inc. and its wholly owned subsidiary, Kie Corporation, and the individual statements of financial position of these companies included in the consolidation as at July 31, 1963, and the related statements of income and deficit for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying statements present fairly the consolidated financial position of Charles W. Adams Associates, Inc. and wholly owned subsidiary at July 31, 1963 and the consolidated results of their operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year. Also, in our opinion, the accompanying statements present fairly the individual financial positions of these companies at July 31, 1963 and the results of their respective operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Boston, Massachusetts
September 23, 1963

Lybrand, Ross Bros. & Montgomery

CHARLES W. ADAMS ASSOCIATES, INC. AND ITS
WHOLLY OWNED SUBSIDIARY KIE CORPORATION
STATEMENT OF FINANCIAL POSITION IN CONSOLIDATION
July 31, 1963

ASSETS	<u>Charles W. Adams Associates, Inc.</u>	<u>Kie Corporation</u>	<u>Adjustments and Eliminations Add (Deduct)</u>	<u>Consolidated</u>
Current assets:				
Cash	\$ 2,098.32	\$ 8,097.32		\$ 10,195.64
Accounts receivable - trade	70,493.40	88,485.07		158,978.47
Less allowance for doubtful accounts	(4,000.00)	(500.00)		(4,500.00)
Accounts receivable - other	1,910.27			1,910.27
Prepaid expenses	1,570.77	1,265.50		2,836.27
Total current assets	<u>72,072.76</u>	<u>97,347.89</u>		169,420.65
Fixed assets, at cost:				
Furniture, fixtures, leasehold improvements and motor vehicle	25,155.11	15,783.20		40,938.31
Less allowance for depreciation and amortization	(5,789.51)	(817.01)		(6,606.52)
Other assets:				
Copyrights, at cost		28,133.00		28,133.00
Advance to subsidiary	77,433.34		(\$ 77,433.34) (2)	
Investment in Kie Corporation, at cost	28,000.00		(28,000.00) (1)	
Other	1,419.93	213.60		1,633.53
	<u>\$198,291.63</u>	<u>\$140,660.68</u>	<u>(\$105,433.34)</u>	<u>\$233,518.97</u>
LIABILITY AND SHAREHOLDER'S EQUITY				
Current liabilities:				
5 1/2% demand note payable to bank	15,000.00			15,000.00
Accounts payable	21,381.39	21,662.37		43,043.76
Accrued expenses	12,924.34	5,679.11		18,603.45
Equipment lease payments, current portion (note B)	3,927.36			3,927.36
Deferred subscription income	3,798.00			3,798.00
Total current liabilities	<u>57,031.09</u>	<u>27,341.48</u>		84,372.57
Equipment lease payments, non-current portion (note B)	11,487.68			11,487.68
Advance from parent		77,433.34	(77,433.34) (2)	
Common stock, par value 1¢, 1,000,000 shares authorized, 401,200 shares issued and outstanding at amounts paid in (note C)	150,400.00			150,400.00
Common stock, no par, 2,000 shares authorized, 1,050 shares issued and outstanding at amounts paid in		51,875.00	(51,875.00) (1)	
Deficit	<u>(20,627.14)</u>	<u>(15,989.14)</u>	<u>23,875.00</u> (1)	<u>(12,741.28)</u>
	<u>\$198,291.63</u>	<u>\$140,660.68</u>	<u>(\$105,433.34)</u>	<u>\$233,518.97</u>

The accompanying notes are an integral part of this statement.

CHARLES W. ADAMS ASSOCIATES, INC. AND ITS
 WHOLLY OWNED SUBSIDIARY KIE CORPORATION
 STATEMENT OF INCOME AND DEFICIT IN CONSOLIDATION
 Year Ended July 31, 1963

	Charles W. Adams Associates, Inc.	Kie Corporation	Adjustments and Eliminations Add (Deduct)	Consolidated
A - The companies are operating under long-term contracts aggregating approximately \$10,000,000 of approved work.				
Income:				
Projects	\$435,462.48	\$234,956.82	(\$65,075.62) (3)	\$605,343.68
Computer Characteristics Quarterly sales	18,076.06			18,076.06
Other	685.47			685.47
	<u>454,224.01</u>	<u>234,956.82</u>	<u>(65,075.62)</u>	<u>\$624,105.21</u>
B - The companies are operating under long-term contracts aggregating approximately \$10,000,000 of approved work.				
Expenses:				
Administrative	116,847.46	29,774.45	(1,833.01) (3)	144,788.90
Projects	182,039.96	145,835.57	(45,646.59) (3)	282,228.94
Facility	31,549.03	12,946.42		44,495.45
Supplies and services	12,652.73	6,669.82		19,322.55
Indirect employee benefits	38,915.85	6,540.97		45,456.82
Promotional	10,347.16	1,969.62		12,316.78
Professional development	1,686.68	289.00		1,975.68
Computer Characteristics Quarterly	17,566.85			17,566.85
Research and development	3,885.53	19,884.33	(17,596.02) (3)	6,173.84
	<u>415,491.25</u>	<u>223,910.18</u>	<u>(65,075.62)</u>	<u>574,325.81</u>
Net income	38,732.76	11,046.64		49,779.40
Deficit July 31, 1962	26,635.76	27,035.78	(23,875.00) (1)	29,796.54
Receivable from former California subsidiary declared worthless	32,724.14			32,724.14
Deficit July 31, 1963	<u>\$ 20,627.14</u>	<u>\$ 15,989.14</u>	<u>(\$23,875.00)</u>	<u>\$ 12,741.28</u>

The accompanying notes are an integral part of this statement.

CHARLES W. ADAMS ASSOCIATES, INC. AND ITS
WHOLLY OWNED SUBSIDIARY KIE CORPORATION

NOTES TO FINANCIAL STATEMENTS IN CONSOLIDATION

- The companies are renting general office equipment and space under long-term leases. Annual rentals under these leases aggregate approximately \$37,000. In addition, a lease for a computer with an annual rental of approximately \$56,000 was executed at the year end.
- Charles W. Adams Associates, Inc. is accounting on an installment purchase basis for a group of leases executed this year. Fixed asset and related liability accounts have been recorded at an amount equal to the sum of monthly lease payments, excluding interest, plus the option price, if any, to purchase the assets.
- At July 31, 1963 there were restricted stock options outstanding for the purchase of 40,000 shares of the parent company's capital stock at a price of \$2.50 per share. Options for 20,000 shares granted to the Treasurer and members of an underwriting group expire during 1966. Options for 20,000 shares granted to employees expire prior to 1971.

CHARLES W. ADAMS ASSOCIATES, INC.
AND KIE CORPORATION

ADJUSTMENTS AND ELIMINATIONS

July 31, 1963

1.

Common stock - Kie Corporation	\$51,875.00	
Investment in subsidiary		\$28,000.00
Deficit (at acquisition)		23,875.00
(To eliminate investment in subsidiary)		

2.

Advance from parent	\$77,433.34	
Advance to subsidiary		\$77,433.34
(To eliminate inter-company borrowing)		

3.

Project income	\$65,075.62	
Administrative expense		\$ 1,833.01
Project expense		45,646.59
Other expense		17,596.02
(To eliminate inter-company billings)		



g. 1/1/62

LYBRAND, ROSS BROS. & MONTGOMERY
CPAs, Auditors and Arbitrators

Charles W. Adams Associates, Inc.
Bedford, Massachusetts

We have examined the consolidated statement of financial position of Charles W. Adams Associates, Inc. and subsidiaries and the individual statements of financial position of the companies included in the consolidation as at July 31, 1962, and the related consolidated income and deficit for the year then ended.

**CHARLES W. ADAMS ASSOCIATES, INC.
AND SUBSIDIARIES**

FINANCIAL STATEMENTS IN CONSOLIDATION

July 31, 1962

The accompanying consolidated financial statements present a true and fair view of the financial position of Charles W. Adams Associates, Inc. and subsidiaries as at July 31, 1962 and the consolidated results of their operations for the year then ended, in conformity with generally accepted accounting principles. Also, in our opinion, the accompanying consolidated financial statements and the individual financial statements of the companies as at July 31, 1962 and the results of their operations for the period then ended, in conformity with generally accepted accounting principles.

Boston, Massachusetts
October 1, 1962

[Signature]

LYBRAND, ROSS BROS. & MONTGOMERY

BOSTON OFFICE

LYBRAND, ROSS BROS. & MONTGOMERY

ACCOUNTANTS AND AUDITORS

NEW YORK	DETROIT	BIRMINGHAM
PHILADELPHIA	CLEVELAND	DALLAS
CHICAGO	CINCINNATI	HOUSTON
BOSTON	ROCKFORD	TULSA
BALTIMORE	ST. LOUIS	SAN FRANCISCO
WASHINGTON	LOUISVILLE	LOS ANGELES
PITTSBURGH	HARTFORD	SEATTLE
PHOENIX	PORTLAND	

COOPERS & LYBRAND

IN AREAS OF THE WORLD
OUTSIDE THE UNITED STATES

Charles W. Adams Associates, Inc.
Bedford, Massachusetts

We have examined the consolidated statement of financial position of Charles W. Adams Associates, Inc. and subsidiaries and the individual statements of financial position of the companies included in the consolidation as at July 31, 1962, and the related statements of income and deficit for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying statements present fairly the consolidated financial position of Charles W. Adams Associates, Inc. and subsidiaries at July 31, 1962 and the consolidated results of their operations for the year then ended, in conformity with generally accepted accounting principles. Also, in our opinion, the accompanying statements present fairly the individual financial positions of the companies at July 31, 1962 and the results of their respective operations for the period then ended, in conformity with generally accepted accounting principles.

Boston, Massachusetts
October 3, 1962

Lybrand, Ross Bros. & Montgomery

CHARLES W. ADAMS ASSOCIATES, INC. AND SUBSIDIARIES
STATEMENT OF FINANCIAL POSITION IN CONSOLIDATION
At July 31, 1962

ASSETS	Charles W. Adams Associates, Inc. (A Delaware Corp.)	Charles W. Adams Associates, Inc. (A California Corp.)	Kie Corporation	Adjustments and Eliminations Add (Deduct)	Consolidated
Current assets:					
Cash	\$ 25,333.64	\$ 2,873.22	\$ 295.08		\$ 28,501.94
Accounts receivable	58,583.03	17,235.41			75,818.44
Less allowance for doubtful accounts	(2,000.00)	(2,000.00)			(4,000.00)
Prepaid expenses	<u>1,551.88</u>	<u>970.75</u>	<u>1,500.00</u>		<u>4,022.63</u>
Total current assets	83,468.55	19,079.38	1,795.08		104,343.01
Fixed assets:					
Furniture, fixtures and motor vehicles	6,765.81	8,897.39	1,646.07		17,309.27
Less allowances for depreciation	(1,958.06)	(1,387.51)	(167.01)		(3,512.58)
Other assets:					
Copyrights			28,133.00		28,133.00
Advances to subsidiary corporations	48,564.24			(\$48,564.24)(3)	
Investment in subsidiary corporation	28,000.00			(28,000.00)(2)	
Other	<u>2,080.16</u>				<u>2,080.16</u>
	<u>\$166,920.70</u>	<u>\$26,589.26</u>	<u>\$31,407.14</u>	<u>(\$76,564.24)</u>	<u>\$148,352.86</u>
LIABILITIES AND SHAREHOLDERS' EQUITY					
Current liabilities:					
Notes payable	20,000.00	2,201.02			22,201.02
Accounts payable	10,524.11	6,812.53	780.27		18,116.91
Accrued expenses	6,982.35	71.00	30.75		7,084.10
Deferred subscription income	<u>5,650.00</u>				<u>5,650.00</u>
Total current liabilities	43,156.46	9,084.55	811.02		53,052.03
Advances from parent corporation		42,807.34	5,756.90	(48,564.24)(3)	
Common stock, par value 1¢, 1,000,000 shares authorized, 401,200 shares issued and outstanding at amounts paid in	150,400.00				150,400.00
Common stock, par value \$1.00, 3,000 shares authorized, no shares issued					
Common stock, par value \$1.00, 200,000 shares authorized, 105,000 shares issued and outstanding at amounts paid in			51,875.00 ✓	(51,875.00)(2)	
Deficit	<u>(26,635.76)</u>	<u>(25,302.63)</u>	<u>(27,035.78) ✓</u>	<u>23,875.00(2)</u>	<u>(55,099.17)</u>
	<u>\$166,920.70</u>	<u>\$26,589.26</u>	<u>\$31,407.14</u>	<u>(\$76,564.24)</u>	<u>\$148,352.86</u>

The accompanying notes are an integral part of this statement.

CHARLES W. ADAMS ASSOCIATES, INC. AND SUBSIDIARIES
 STATEMENT OF INCOME AND DEFICIT IN CONSOLIDATION
 Year Ended July 31, 1962

	Charles W. Adams Associates, Inc. (A Delaware Corp.)	Charles W. Adams Associates, Inc. (A California Corp.)	Kie Corporation	Adjustments and Eliminations Add (Deduct)	Consolidated
Income:					
Contract income	\$273,849.41	\$51,138.51			\$324,987.92
Computer Quarterly sales	25,319.09				25,319.09
Seminar income		10,182.49			10,182.49
Other income	<u>1,052.03</u>	<u>103.08</u>		(\$ 750.00)(4)	<u>405.11</u>
	<u>300,220.53</u>	<u>61,424.08</u>		<u>(750.00)</u>	<u>360,894.61</u>
Expenses:					
Salaries and wages	188,204.76	43,636.08	\$ 1,000.00	628.88(1)	233,469.72
Administrative	92,887.25	29,376.20	1,921.03	(750.00)(4) (628.88)(1)	122,805.60
Travel	19,549.35	13,449.27	239.75		33,238.37
Computer Quarterly	<u>10,774.06</u>				<u>10,774.06</u>
	<u>311,415.42</u>	<u>86,461.55</u>	<u>3,160.78</u>	<u>(750.00)</u>	<u>400,287.75</u>
Net operating loss	11,194.89	25,037.47	3,160.78		39,393.14
Deficit at beginning of year	<u>15,440.87</u>	<u>265.16</u>	<u>23,875.00</u>	(23,875.00)(2)	<u>15,706.03</u>
Deficit at end of year	<u>\$ 26,635.76</u>	<u>\$25,302.63</u>	<u>\$27,035.78</u>	<u>(\$23,875.00)</u>	<u>\$ 55,099.17</u>

The accompanying notes are an integral part of this statement.

CHARLES W. ADAMS ASSOCIATES, INC. AND SUBSIDIARIES
ADJUSTMENTS AND ELIMINATIONS

July 31, 1962

	(1)		
Payroll expense		\$628.88	
Administrative expense			\$628.88
(To reclassify fees owed by Kie Corporation to parent for services since acquisition)			
	(2)		
Common stock - Kie Corporation		\$51,875.00	
Investment in subsidiary			\$28,000.00
Retained earnings (at acquisition)			23,875.00
(To eliminate investment in subsidiary)			
	(3)		
Advance from parent		\$48,564.24	
Advances to subsidiary			\$48,564.24
(To eliminate inter-company borrowing)			
	(4)		
Rent income		\$750.00	
Administrative expense (rent and utility)			\$750.00
(To eliminate billing of Kie Corporation by parent)			

CHARLES W. ADAMS ASSOCIATES, INC. AND SUBSIDIARIES
NOTES TO FINANCIAL STATEMENTS

- A - The accompanying financial statements consolidate the accounts of Charles W. Adams Associates, Inc. (a Delaware corporation) with those of Charles W. Adams Associates, Inc. (a California corporation) and Kie Corporation, wholly owned subsidiaries. Results of operations for Kie Corporation are included only from the date of its purchase by the parent on June 20, 1962 to July 31, 1962.
- B - The companies are renting office equipment and space under long-term leases. Annual rentals under these leases aggregate approximately \$12,000.
- C - At July 31, 1962 there were stock options outstanding for the purchase of 24,000 shares of the parent company's capital stock at a price of \$25.00 per share. Options for 20,000 shares were granted to the Treasurer and members of an underwriting group and expire during 1966. Options for 4,000 shares granted under an employment agreement with management of Kie Corporation are exercisable prior to March 1, 1967.



LYBRAND, ROSS BROS. & MONTGOMERY
ACCOUNTANTS AND AUDITORS

Lybrand, Ross Bros. & Montgomery
100 State Street
Boston, Massachusetts 02109

Charles W. Adams Associates, Inc.
Bedford, Massachusetts

We have examined the consolidated statement of financial position of Charles W. Adams Associates, Inc. and subsidiaries and the consolidated statements of financial position of the companies included in the consolidation as at July 31, 1962, and the consolidated statement of income and deficit for the year then ended.

CHARLES W. ADAMS ASSOCIATES, INC.
AND SUBSIDIARIES

FINANCIAL STATEMENTS IN CONSOLIDATION

July 31, 1962

In our opinion, the accompanying statements present fairly the consolidated financial position of Charles W. Adams Associates, Inc. and subsidiaries at July 31, 1962 and the consolidated results of their operations for the year then ended, in conformity with generally accepted accounting principles. Also in our opinion, the accompanying statements present fairly the financial position of the companies at July 31, 1962 and the results of their respective operations for the year then ended, in conformity with generally accepted accounting principles.

Boston, Massachusetts
October 1, 1962

Lybrand, Ross Bros. & Montgomery

LYBRAND, ROSS BROS. & MONTGOMERY

BOSTON OFFICE

LYBRAND, ROSS BROS. & MONTGOMERY

ACCOUNTANTS AND AUDITORS

COOPERS & LYBRAND
IN AREAS OF THE WORLD
OUTSIDE THE UNITED STATES

Charles W. Adams Associates, Inc.
Bedford, Massachusetts

We have examined the consolidated statement of financial position of Charles W. Adams Associates, Inc. and subsidiaries and the individual statements of financial position of the companies included in the consolidation as at July 31, 1962, and the related statements of income and deficit for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying statements present fairly the consolidated financial position of Charles W. Adams Associates, Inc. and subsidiaries at July 31, 1962 and the consolidated results of their operations for the year then ended, in conformity with generally accepted accounting principles. Also, in our opinion, the accompanying statements present fairly the individual financial positions of the companies at July 31, 1962 and the results of their respective operations for the period then ended, in conformity with generally accepted accounting principles.

Boston, Massachusetts
October 3, 1962

Lybrand, Ross Bros. & Montgomery

CHARLES W. ADAMS ASSOCIATES, INC. AND SUBSIDIARIES
 STATEMENT OF INCOME AND DEFICIT IN CONSOLIDATION
 Year Ended July 31, 1962

	Charles W. Adams Associates, Inc. (A Delaware Corp.)	Charles W. Adams Associates, Inc. (A California Corp.)	Kie Corporation	Adjustments and Eliminations Add (Deduct)	Consolidated
Income:					
Contract income	\$273,849.41	\$51,138.51			\$324,987.92
Computer Quarterly sales	25,319.09				25,319.09
Seminar income		10,182.49			10,182.49
Other income	1,052.03	103.08		(\$ 750.00)(4)	405.11
	<u>300,220.53</u>	<u>61,424.08</u>		<u>(750.00)</u>	<u>360,894.61</u>
Expenses:					
Salaries and wages	188,204.76	43,636.08	\$ 1,000.00	628.88(1)	233,469.72
Administrative	92,887.25	29,376.20	1,921.03	(750.00)(4) (628.88)(1)	122,805.60
Travel	19,549.35	13,449.27	239.75		33,238.37
Computer Quarterly	10,774.06				10,774.06
	<u>311,415.42</u>	<u>86,461.55</u>	<u>3,160.78</u>	<u>(750.00)</u>	<u>400,287.75</u>
Net operating loss	11,194.89	25,037.47	3,160.78		39,393.14
Deficit at beginning of year	15,440.87	265.16	23,875.00	(23,875.00)(2)	15,706.03
Deficit at end of year	<u>\$ 26,635.76</u>	<u>\$25,302.63</u>	<u>\$27,035.78</u>	<u>(\$23,875.00)</u>	<u>\$ 55,099.17</u>

The accompanying notes are an integral part of this statement.

CHARLES W. ADAMS ASSOCIATES, INC. AND SUBSIDIARIES
STATEMENT OF FINANCIAL POSITION IN CONSOLIDATION
At July 31, 1962

ASSETS	Charles W. Adams Associates, Inc. (A Delaware Corp.)	Charles W. Adams Associates, Inc. (A California Corp.)	Kie Corporation	Adjustments and Eliminations Add (Deduct)	Consolidated
Current assets:					
Cash	\$ 25,333.64	\$ 2,873.22	\$ 295.08		\$ 28,501.94
Accounts receivable	58,583.03	17,235.41			75,818.44
Less allowance for doubtful accounts	(2,000.00)	(2,000.00)			(4,000.00)
Prepaid expenses	<u>1,551.88</u>	<u>970.75</u>	<u>1,500.00</u>		<u>4,022.63</u>
Total current assets	83,468.55	19,079.38	1,795.08		104,343.01
Fixed assets:					
Furniture, fixtures and motor vehicles	6,765.81	8,897.39	1,646.07		17,309.27
Less allowances for depreciation	(1,958.06)	(1,387.51)	(167.01)		(3,512.58)
Other assets:					
Copyrights			28,133.00		28,133.00
Advances to subsidiary corporations	48,564.24			(\$48,564.24)(3)	
Investment in subsidiary corporation	28,000.00			(28,000.00)(2)	
Other	<u>2,080.16</u>				<u>2,080.16</u>
	<u>\$166,920.70</u>	<u>\$26,589.26</u>	<u>\$31,407.14</u>	<u>(\$76,564.24)</u>	<u>\$148,352.86</u>
LIABILITIES AND SHAREHOLDERS' EQUITY					
Current liabilities:					
Notes payable	20,000.00	2,201.02			22,201.02
Accounts payable	10,524.11	6,812.53	780.27		18,116.91
Accrued expenses	6,982.35	71.00	30.75		7,084.10
Deferred subscription income	<u>5,650.00</u>				<u>5,650.00</u>
Total current liabilities	43,156.46	9,084.55	811.02		53,052.03
Advances from parent corporation		42,807.34	5,756.90	(48,564.24)(3)	
Common stock, par value 1¢, 1,000,000 shares authorized, 401,200 shares issued and outstanding at amounts paid in	150,400.00				150,400.00
Common stock, par value \$1.00, 3,000 shares authorized, no shares issued					
Common stock, par value \$1.00, 200,000 shares authorized, 105,000 shares issued and outstanding at amounts paid in			51,875.00	(51,875.00)(2)	
Deficit	<u>(26,635.76)</u>	<u>(25,302.63)</u>	<u>(27,035.78)</u>	<u>23,875.00(2)</u>	<u>(55,099.17)</u>
	<u>\$166,920.70</u>	<u>\$26,589.26</u>	<u>\$31,407.14</u>	<u>(\$76,564.24)</u>	<u>\$148,352.86</u>

The accompanying notes are an integral part of this statement.

CHARLES W. ADAMS ASSOCIATES, INC. AND SUBSIDIARIES

ADJUSTMENTS AND ELIMINATIONS

July 31, 1962

(1)

Payroll expense	\$628.88	
Administrative expense		\$628.88
(To reclassify fees owed by Kie Corporation to parent for services since acquisition)		

(2)

Common stock - Kie Corporation	\$51,875.00	
Investment in subsidiary		\$28,000.00
Retained earnings (at acquisition)		23,875.00
(To eliminate investment in subsidiary)		

(3)

Advance from parent	\$48,564.24	
Advances to subsidiary		\$48,564.24
(To eliminate inter-company borrowing)		

(4)

Rent income	\$750.00	
Administrative expense (rent and utility)		\$750.00
(To eliminate billing of Kie Corporation by parent)		

CHARLES W. ADAMS ASSOCIATES, INC. AND SUBSIDIARIES
NOTES TO FINANCIAL STATEMENTS

- A - The accompanying financial statements consolidate the accounts of Charles W. Adams Associates, Inc. (a Delaware corporation) with those of Charles W. Adams Associates, Inc. (a California corporation) and Kie Corporation, wholly owned subsidiaries. Results of operations for Kie Corporation are included only from the date of its purchase by the parent on June 20, 1962 to July 31, 1962.
- B - The companies are renting office equipment and space under long-term leases. Annual rentals under these leases aggregate approximately \$12,000.
- C - At July 31, 1962 there were stock options outstanding for the purchase of 24,000 shares of the parent company's capital stock at a price of \$25.00 per share. Options for 20,000 shares were granted to the Treasurer and members of an underwriting group and expire during 1966. Options for 4,000 shares granted under an employment agreement with management of Kie Corporation are exercisable prior to March 1, 1967.

3

adams associates

RESPONSIVE DATA PROCESSING --- MAN-MACHINE COLLABORATION

by

CHARLES W. ADAMS
President
Charles W. Adams Associates, Inc.

(This is a reproduction of the manuscript
of an article written by Mr. Adams for the
forthcoming edition of THE AMERICAN DATA
PROCESSING YEARBOOK.)

May 1964

adams associates

On-line, real-time computing systems have been around for a long time, in the SAGE air defense system, in handling airline reservations, in controlling refineries, power plants and the like. In each of these systems men have played crucial roles --- as participant, user, monitor, supervisor --- and each of these systems, especially SAGE, has been a progenitor of the man-machine systems now emerging as the next major development in electronic data processing.

All data processing systems, of course, have the same basic block diagram:

And in a very real sense, all data processing systems are responsive, involve man-machine interaction, and operate in real time. (What other kind of time is there?) A payroll system, for example, is certainly responsive; it takes data from people, and it pays them in real (that is, acceptable) time (say, every Friday). The basic question, then, is what is an acceptable response time.

Many accounting, engineering and scientific computational procedures are considered satisfactory if the responses occur within a month, a week, a day. In quite a few, no quicker response would be desirable or even meaningful. Air defense, airline reservations and process control are outstanding examples of the other extreme, where responses within minutes at most are mandatory; and these are precisely the areas in which the term "real-time" was first given a distinctive meaning.

It is the area between these extremes --- the area in which quick response is desirable but not imperative --- with which we are here concerned.

Time-Sharing

In the gathering, processing, filing and acting upon data, man and machine must collaborate (unless the man plans to do it all by himself). Ideally, for maximum efficiency, each should do only that part of the job for which he or it is the more capable --- the man providing the judgment in handling exceptions and recognizing overall trends and implications, the computer doing the arithmetic and file retrieval, the machine calling for help when exceptions arise or design choices have to be made.

To work economically with a man in a system where each waits in turn for the other, the computer should presumably

have an hourly cost about the same as that of the man. But the economics of computers, like those of any automatic production process, imply a rapid reduction in price per computation as the volume of computation increases. While computers are available in the \$20,000 price range, making them comparable in monthly rental to the salary of a competent clerk or service engineer, they are small, slow machines severely limited in storage capacity and input-output versatility. By paying ten times as much for a computer, one gets much more than ten times the computing power; and by paying a hundred times as much, one gets an even greater increase. Meanwhile, the gap between the rental of the machine and the salary of the man is widening at an alarming rate. Thus it seems clear that much can be gained by sharing one computer among many users.

There is nothing novel in time-sharing, of course, this being the essence not only of the SAGE, airline reservation and process control systems but also of modern telephone exchanges and automatic message-switching centers. Indeed, it was basic to the multi-processing (variously referred to as parallel-processing or concurrent-processing) employed in many computer designs of the late 1950's and early 1960's to enable a central processor to switch from one off-line job to another in an effort to keep both itself and the slower peripheral devices going at peak rates. But time-sharing, though not

novel in concept, today has a novel function: it is the key that will permit computer centers to become "a community utility capable of supplying computer power to each 'customer' where, when and in the amount needed."¹

Time-Sharing in Business

Much that has been written recently² about large-scale, responsive data processing systems such as American Airlines' SABRE Space Reservation System, Westinghouse's Tele-Computer Center, and Lockheed's System ADA might give the impression that only large companies can benefit from on-line decentralized use of an expensive, efficient centralized system. That is not so. Time-sharing and responsive data processing are now available to businesses of any size for handling the day-to-day problems of management. Through a service bureau operating on-line, even the smallest user can have at his disposal a centralized time-shared computer. Conventional

1. "M.I.T.'s Project MAC: Current Status," from the Office of Public Relations, Massachusetts Institute of Technology, Cambridge, April 21, 1964.
2. Gilbert Burck, "'On-Line' in 'Real Time'," FORTUNE, Vol. LXIX No. 4, April 1964, pp. 141-145, 246, 248, 250, 252.

service bureaus have been operating for years, of course; but they met the needs of only a part of the small- and medium-sized business community. Businessmen feared (and justifiably so) the loss of security that normally protected their files from the eyes of competitors.

Such fear is no longer justified, for in an on-line operation this information is keyed directly from his place of business into the service bureau computer. Cards and card transfer are no longer deterring factors and printing can be done in the user's office rather than at the computer site. The source data and printed output are no longer filed in the computer room, and thus are no longer visually accessible to anyone in that area.

A good example of an on-line service bureau operation is KEYDATA Corporation, of Boston, which in July 1963 installed its first dynamic data processing system, a DEC PDP-4 computer connected by direct telephone lines to so-called KEYDATA Stations (Teletypewriters) located in users' offices. The system is programmed to provide a variety of packaged services. To prepare an invoice, for instance, the KDS operator types on the form provided (see Figure 1) the customer number, shipping instructions, customer order number, department, date, quantity and stock number of items, and an end of transaction signal - T.



Figure 1: The example above is substantially the same as the one submitted for publication

The computer then generates the information needed to complete the invoice, that is, header data, name and address of customer, item description, unit price, extensions, totals, discounts, credit status, back order information, and prepaid discounts, credit status, back order information, and prepaid transportation charges. The operator checks the data as it is being printed. If she has made a mistake in typing the customer number or item stock number, she can recognize it because the customer's name or the item description printed by the computer will differ from the source data. Any such errors can be immediately corrected by her through established procedures. The operator is constantly "on-line" in "real-time" and is collaborating with the machine efficiently and economically.

The computer can maintain all balances, provide control totals and audit trails, and produce, upon request, reports and statements such as invoice registers, trial balances, aged trial balances, commission statements, sales and inventory analyses, and so forth. For the businessman or government agency that does not have a computer system but wants such operations as these automated, the KEYDATA system and its counterparts will be a boon, providing the same control capabilities as large-scale computers do for big operations.

The small-scale computers used for billing (such as NCR's Computronic, Friden's 6010, the Monrobot XI, and the

Burroughs EZ100) can and do present, of course, a partial solution to the problem by preparing the invoice at the time an order is processed and producing a by-product record for later batch processing of accounts receivable, sales analyses, etc. But time-shared use of a large system permits automatic access to the files to speed the preparation of invoices and improve their accuracy as well.

It further permits recording data on tape and directly integrating the new data with previously recorded information --- only one entry of data being required --- thus achieving a truly integrated data processing system. Then, too, printers can be installed in warehouses or at other locations to provide additional copies of the invoice, prepare shipping papers, stockpicking tickets, etc. When items are out-of-stock, the on-line system immediately notifies the clerk and, at her discretion or by predetermined policy, can substitute a similar item, back-order the item, or eliminate it from the invoice.

Time-Sharing in Engineering

Much time and money has recently been diverted to the development of responsive data processing systems that will aid engineers and scientists in research, design, management and education. The approach varies somewhat, depending on the magnitude of the computations likely to be required.

For the civil engineer, the actuary or the biologist, for example, the computational requirements are not large in number or complexity. He often does them on a desk calculator in a few minutes a day or a few hours a week; but would benefit greatly from the speed and accuracy of a fully-automatic, record keeping and computing facility. For this situation, standard computing packages for land surveys, cut-and-fill, Che-square and other such operations can be provided by service bureaus like KEYDATA. For laboratory data analysis and other relatively simple but non-standard procedures, KEYDATA has a routine called "George" (Let George do it!) in which the user specifies the layout of a computation sheet, column by column, including those in which he plans to enter data as he records it. Operating one line at a time, usually with at least one item of new data entered on each line, George employs a FORTRAN-like algebraic notation but involves no "Do loops," input-output statements or other FORTRAN trappings. Thus it is extremely easy to learn and use.

On the other hand, the user may require the full capacity of a large machine but would like to operate it as though it were his very own. Attempts to meet this demand by engineers for personal use of a large-scale computer at an economical cost have been undertaken, under ARPA sponsorship, at the Massachusetts Institute of Technology in its MAC (machine-aided cognition, or multiple access computer) Project.

Launched in 1963, Project MAC initially demonstrated its concepts in the summer of that year, and by August 1964 it will offer engineers a responsive data processing system consisting of two IBM 7094 processors with forty Model 35 Teletypes and twenty-eight IBM 1050 Teletypewriters. A person at any terminal can "dial" either processor, each of which can service twenty-four users "simultaneously."

The MAC system can also provide long-distance access through Western Union's TELEX network and AT&T's TWX network. On April 3, 1964, for example, the MAC system was demonstrated over TELEX from Edinburgh, Scotland, by Dr. M. V. Wilkes of Cambridge University, who in 1947 developed the first operating stored-program computer, the EDSAC. And on April 17, 1964, after two or three weeks' nightly use of the computer, another demonstration was made from Oslo, Norway.

How can one processor take care of twenty-eight "simultaneously"? The system rotates the computer's attention to each station in the network. It picks up the orders from one station, works on the problem for 1/20th of a second and stores the partial answer. It then moves to the next station, receives the orders, works on the second problem for 1/20th of a second, and moves to the third station, etc. When a problem is completed, the answer is printed on the Teletypewriter at 100 words a minute. All data and instructions may be stored

within the system, at the option of the user. So fast is the computer operating that it apparently is working for him full-time.

Simple problems are handled immediately; long problems are solved during the computer's "leisure time." To date the users of the MAC system include faculty members and students as well as researchers from several major laboratories. FORTRAN, MAD, SLIP, COMIT, LISP, FAP, a limited version of ALGOL and COGO, and STRESS are presently available in the system. When the computer capacity is not required by the time-sharing users, it reverts to work on a background problem, any off-line computation of perhaps lower priority and maybe involving batch-file processing techniques.

Graphic Computer Systems

The business and engineering systems discussed thus far have involved keyboard input and printer output, generally through the medium of the Teletypewriter. Graphical input and output offers another very promising medium for responsive man-machine systems. Again SAGE has led the way --- CRT displays and light pens are a critical element of the system --- and again the subject is just coming to the attention of the general public, helped no doubt by the inclusion of a scope and light pen as a standard peripheral in the

recently-announced IBM System/360 and the appearance of MIT's Sketchpad in the article, "Machines that Man can Talk With," in the May 1964 edition of FORTUNE.

The use of a computer, scope and light pen for producing and updating engineering drawings more quickly and inexpensively was demonstrated in 1962 by Itek Corporation, using procedures proposed by the author and John T. Gilmore, Jr., of Adams Associates, and Norman H. Taylor of Itek. Currently undergoing further development by Control Data Corporation, this Digigraphic System represents the first practical one available for the purpose. (Sketchpad, developed independently though somewhat later at MIT, employs large amounts of storage for each element of a drawing and relies on the use of the ultra-large TX-2, as opposed to the relatively small DEC PDP-1 and CDC 3200 computers in the Digigraphic development.) Beyond its use in drafting, the system offers great promise in the field of engineering design.

The designer, having previously instructed the machine by pressing the proper push button, creates the line, circle or hexagon required. As he works, the computer straightens the lines and meets the constraints imposed, no matter how rough the designer's sketch has been. To make a correction, the designer, sitting at the console, merely points the pen at part of a drawing to indicate how it should be changed.

The computer responds by redrawing electronically according to the new man-given specifications. The designer has a running review of what he is doing. If he approves what the computer presents on the console tube face, he continues; if not, he corrects any misrepresentation immediately through graphic input, output and feedback.

The graphic representations are automatically translated into mathematical digital form, suitable for engineering analysis and/or processing by microfilm devices, storage and retrieval machines, plotting machines and remote viewers.

Norman H. Taylor has said:³

The user does not concern himself with the inner workings of the computer, but instructs its actions on the console tube face with the light pen. He thus avoids program manipulations in awkward languages or the insertion of data via cards, tapes, and keyboards. In fact, the user need no longer be a computer-oriented person; he is an engineer, tool designer, layout man, or draftsman. The time, and therefore cost, saving resulting from by-passing these procedures are substantial.

3. Norman H. Taylor, "Man-Machine Relationships" - The Need for Reading and Writing," General Motors Corporation Committee on Engineering Computations, April 1, 1964

Conclusions

Responsive data processing has already had a significant effect on new computer design, resulting in larger and more compact memory capacities, faster random access, graphic display devices on-line, programmed units integral to the machine, and other features. Yet more research and development must be done to improve communication channels, devise better interface equipment and interrupt features, etc., so that responsive data processing systems can ensure increasingly higher levels of efficient man-machine collaboration. The demands for more sophisticated systems are in effect revolutionizing the design and manufacture of these systems, and this in turn will broaden the scope of applications to data acquisition and graphic design.

The time-sharing characteristics of these dynamic data processing systems have ushered into the computer world the small business firms and the hordes of engineers, scientists, and university faculties and students who hitherto have had to wait their turn for computer time, or were deprived of access to a computer because of either the high costs involved or the practical difficulties of scheduling the use of one at some perhaps distant service bureau.

With costs decreasing and the range of applications widening, it is easy to see that there will be an upswing in the demand for and supply of responsive data processing systems. Richard E. Sprague predicts that "by 1970, nearly all electronic data processing systems will be of an on-line real-time variety."⁴ And a General Electric spokesman has suggested that it will not be very long until every housewife in her kitchen will have access to a computer. If so, it is a safe bet that it will be by use of the push-button dial on her pretty Princess phone. And it will most certainly be a responsive system --- if only she will listen to it!

4. Richard E. Sprague, "Electronic Business Systems," The Ronald Press Co., New York, 1962

adams associates

BIBLIOGRAPHY

John Pleiffer, "Machines that Man can Talk With," FORTUNE, Vol. LXIX, No. 5, May 1964

Gilbert Burck, "The Boundless Age of the Computer," FORTUNE, Vol. LXIX, No. 3, March 1964

Martin Greenberger, "Computers of Tomorrow," THE ATLANTIC MONTHLY, Vol. 213, No. 5, May 1964, pp. 63-67

"Computers that Feed Many Mouths," BUSINESS WEEK, February 1, 1964, pp. 54-55

"A Computer that Grows With You," BUSINESS WEEK, March 14, 1964, pp. 56-57

John Dearden, "Can Information be Automatic?," HARVARD BUSINESS REVIEW, March-April 1964, pp. 128-135

charles w. **adams associates** inc.

142 THE GREAT ROAD • BEDFORD • MASSACHUSETTS • Area 617 275-8050

March 27, 1964

Mr. Harlan E. Anderson
Vice President
Digital Equipment Corporation
Main Street
Maynard, Massachusetts

Dear Harlan

As we discussed at some length recently, the commercial potentialities of the type of services being developed by Keydata Corporation appear quite impressive. To permit an intelligent decision on how Digital Equipment Corporation and Keydata might collaborate in the profitable exploitation of these potentialities, considerable analysis is required of the market, the hardware and software requirements, and the costs, cash flow, and expected returns. This is especially true because of the interest expressed by D.E.C. in the use of a PDP-6 rather than a smaller system, and the corollary entry into the FORTRAN computation service market.

We therefore propose that D.E.C. and Adams Associates jointly sponsor a study of the marketing, technical, and financial aspects of a possible Keydata Center built around a PDP-6 and aimed initially at two specific market areas: (1) FORTRAN, and (2) on-line invoicing, inventory and accounts receivable applications. This study would require approximately six weeks, with substantial participation by myself and our Messrs. Gilmore, Weinrebe and Weisberg, with support from our Messrs. Sternlieb, Slattery, Rousseau and Curry as well as from some of your people concerned with PDP-6 FORTRAN. Close liaison between us would be maintained by weekly meetings involving you, Ken, Jack, me and other interested parties from both companies.

The study would result in a report divided into the three parts briefly described below:

The Services and Their Market: This part would contain a description, from the user's viewpoint, of the proposed FORTRAN and invoicing capabilities, limitations and prices, as well as a summary of the typical reactions of likely prospects for such services (obtained by several direct

interviews, including those at the New England Business Equipment Exposition on April 21-23, at which Keydata will demonstrate a simplified on-line invoicing activity).

Technical Considerations: This part would include a consideration of the minimum and several alternative hardware configurations and their implications relative to the capacity for handling the two applications. It would also be discussed how time sharing would be accomplished, the difficulties likely to be encountered in developing the necessary programs, and any new hardware features that might prove especially helpful.

Plan of Attack: This would be a detailed plan for implementing the marketing, programming and equipment installation and operation, with month-by-month cash flow analysis for the first eighteen months, together with coarser estimates for the next several years.

Adams Associates normal charge for the study, based on a maximum of 50 man-days at \$250, 50 at \$175 and 25 at \$125, would not exceed \$24,375. We propose that D.E.C., as joint sponsor, contribute \$10,000 toward our costs as well as the time of its people as noted above. It is understood that the intention of both parties would be to work together on the implementation of the plan if it proves to be mutually attractive; but that neither party is committed to this course of action or constrained from pursuing a similar course, either independently or jointly with others, should the decision be made that Adams Associates and D.E.C. will not do so together.

If D.E.C. wishes to join us in this study under the conditions outlined above, you may so indicate by signing below and returning one copy of the letter to us. If your acceptance is received by April 1, the report will be planned for completion by May 11, 1964. Your \$10,000 contribution will be payable in two installments, half at the end of the first three weeks of the study and the remainder upon delivery of the final report.

CHARLES W. ADAMS ASSOCIATES, INC.

by Charles W. Adams, pres.

Accepted for:

DIGITAL EQUIPMENT CORPORATION

by _____

date _____

Charles W. **adams associates** inc.

142 THE GREAT ROAD • BEDFORD • MASSACHUSETTS • CRestview 4-8050

March 27, 1964

Mr. Harlan E. Anderson
Vice President
Digital Equipment Corporation
Main Street
Maynard, Massachusetts

Dear Harlan

As we discussed at some length recently, the commercial potentialities of the type of services being developed by Keydata Corporation appear quite impressive. To permit an intelligent decision on how Digital Equipment Corporation and Keydata might collaborate in the profitable exploitation of these potentialities, considerable analysis is required of the market, the hardware and software requirements, and the costs, cash flow, and expected returns. This is especially true because of the interest expressed by D.E.C. in the use of a PDP-6 rather than a smaller system, and the corollary entry into the FORTRAN computation service market.

We therefore propose that D.E.C. and Adams Associates jointly sponsor a study of the marketing, technical, and financial aspects of a possible Keydata Center built around a PDP-6 and aimed initially at two specific market areas: (1) FORTRAN, and (2) on-line invoicing, inventory and accounts receivable applications. This study would require approximately six weeks, with substantial participation by myself and our Messrs. Gilmore, Weinrebe and Weisberg, with support from our Messrs. Sternlieb, Slattery, Rousseau and Curry as well as from some of your people concerned with PDP-6 FORTRAN. Close liaison between us would be maintained by weekly meetings involving you, Ken, Jack, me and other interested parties from both companies.

The study would result in a report divided into the three parts briefly described below:

The Services and Their Market: This part would contain a description, from the user's viewpoint, of the proposed FORTRAN and invoicing capabilities, limitations and prices, as well as a summary of the typical reactions of likely prospects for such services (obtained by several direct

interviews, including those at the New England Business Equipment Exposition on April 21-23, at which Keydata will demonstrate a simplified on-line invoicing activity).

Technical Considerations: This part would include a consideration of the minimum and several alternative hardware configurations and their implications relative to the capacity for handling the two applications. It would also be discussed how time sharing would be accomplished, the difficulties likely to be encountered in developing the necessary programs, and any new hardware features that might prove especially helpful.

Plan of Attack: This would be a detailed plan for implementing the marketing, programming and equipment installation and operation, with month-by-month cash flow analysis for the first eighteen months, together with coarser estimates for the next several years.

Adams Associates normal charge for the study, based on a maximum of 50 man-days at \$250, 50 at \$175 and 25 at \$125, would not exceed \$24,375. We propose that D.E.C., as joint sponsor, contribute \$10,000 toward our costs as well as the time of its people as noted above. It is understood that the intention of both parties would be to work together on the implementation of the plan if it proves to be mutually attractive; but that neither party is committed to this course of action or constrained from pursuing a similar course, either independently or jointly with others, should the decision be made that Adams Associates and D.E.C. will not do so together.

If D.E.C. wishes to join us in this study under the conditions outlined above, you may so indicate by signing below and returning one copy of the letter to us. If your acceptance is received by April 1, the report will be planned for completion by May 11, 1964. Your \$10,000 contribution will be payable in two installments, half at the end of the first three weeks of the study and the remainder upon delivery of the final report.

CHARLES W. ADAMS ASSOCIATES, INC.

by _____

Accepted for:

DIGITAL EQUIPMENT CORPORATION










by _____

date _____

YOUR KEY TO DYNAMIC DATA PROCESSING

HOW CAN IMPROVE YOUR SALES-INVENTORY-BILLING SYSTEM

If you do **not** have your own computer . . .

-  provides complete on-line data acquisition facilities for source data automation
-  provides these computer capabilities through a simple KEYDATA station located on your premises
-  eliminates the risk and cost of document transfer
-  gives you the elements of a complete management operating system
-  enables you to query the computer for customer credit status
-  enables you to query the computer for inventory status
-  alerts you to credit and inventory imbalances as they occur
-  helps you to automate warehousing operations
-  makes it possible for your company to have the same control capabilities as the largest corporation




If you **do** have your own computer . . .

-  helps you use it more effectively by eliminating such costly steps as . . .

sorting
merging
collating
card-to-tape conversion
format & content checking

with KEYDATA you convert **directly** from raw data to magnetic tape!

In **either** case . . .

-  can reduce your operating cost
-  can increase your operating efficiency
-  is a valuable supplement to any computer installation

KEYDATA APPLICATIONS

GENERAL BUSINESS FUNCTIONS

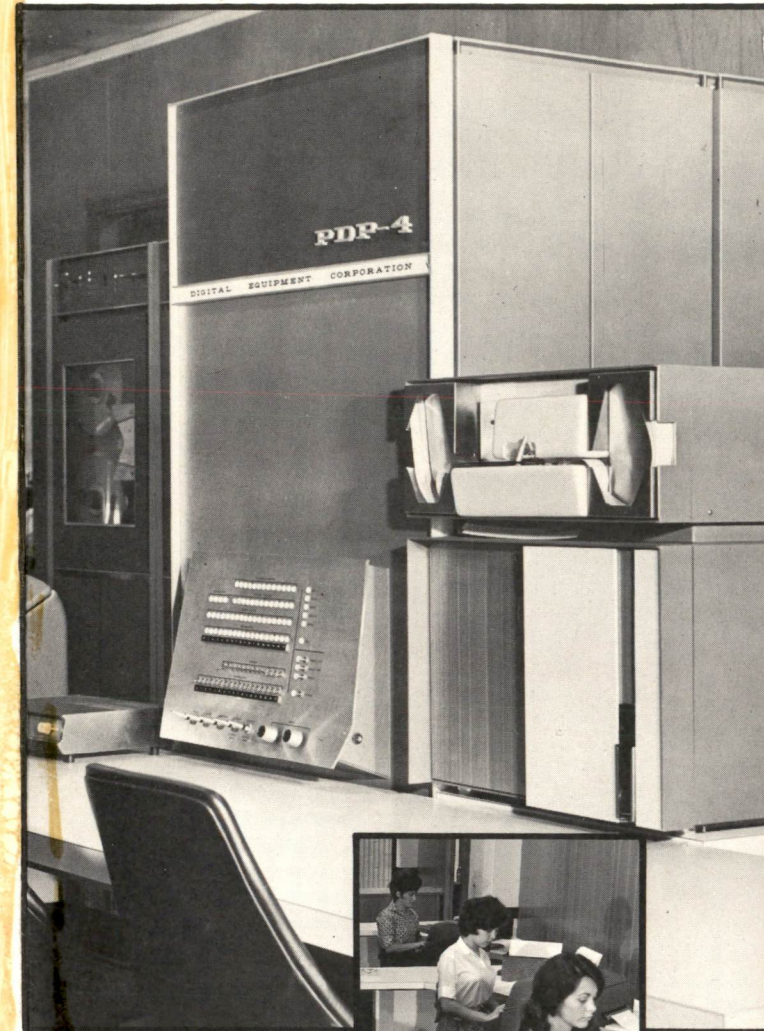
Invoicing
Inventory Control
Accounts Receivable
Accounts Payable
Credit Checking
Production Scheduling
Attendance Recording
Warehouse Operations

SCIENTIFIC & ENGINEERING COMPUTATIONS

General-Purpose Super Desk Calculator
FORTRAN Preprocessor
Civil Engineering Computations
Structural Engineering Computations

SPECIALIZED APPLICATIONS

Hospitals & Clinics
Industrial Security
Transportation
Finance
Communications
Printing & Publishing
Research Centers
Banking
Insurance
Hotels
Libraries
Legal Work
Recreation



KEYDATA CORPORATION

68 DEVONSHIRE STREET
BOSTON, MASSACHUSETTS 02109
Tel: 617-523-3235

The Dynamic Data Processing Division of
charles w. adams associates, inc.



KEYDATA CORPORATION
division of charles w. adams associates, inc.

← A TYPICAL PHASE OF THE KEYDATA SALES-INVENTORY-BILLING SYSTEM

The **KEYDATA** system for **sales • inventory • billing** "on-line" in "real-time"

The KEYDATA system automates the daily transactions of the sales-inventory-billing cycle . . . Invoices, Credit Memos, Cash Receipts and Inventory Receipts. The system maintains all balances, and provides control totals and audit trails.

As the example below clearly illustrates, the heart of the system is the collaboration of man and machine. The clerk keys only the information not already known to the computer; the computer supplies such things as name and address, item description, prices, etc., thereby saving clerical time and simultaneously insuring the validity of the keyed-in data.

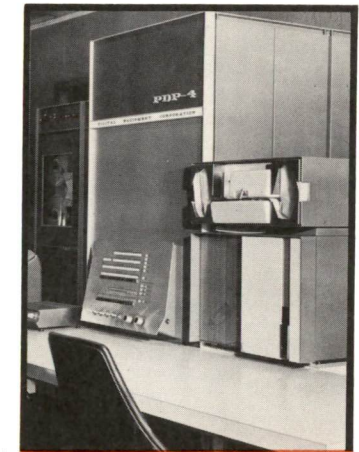
DATA READILY AVAILABLE FOR

- invoice registers
- trial balances
- aged trial balances
- commission statements
- customer statements
- sales analyses
- inventory analyses



YOUR OPERATOR GENERATES THE DATA SHOWN IN BLACK

CUSTOMER No.	SALESMAN No.	AREA CODE	COMM. CODE	INVOICE DATE	TERMS	AS OF DATE	INVOICE No.
32-1234	23	320	1	3/24/64	n-60	5/1/64	123456
SHIP VIA: ACME		CUST. ORDER NO.: 123			DEPT.: 24		
JOHN M. JONES 123 MIDDLE STREET ANYWHERE UNITED STATES				← Sold To:			
SAME:				← Ship To:			
QUANTITY	STOCK No.	ITEM DESCRIPTION	UNIT PRICE	EXTENSION			
100	100-83	RED CALF	\$ 7.25	\$ 725.00			
10	100-84	BROWN CALF	\$ 7.25	\$ 72.50			
100	100-85	CHESNUT CALF	\$ 7.25	\$ 725.00			
100	100-822	OTTER CALF	\$ 3.19	\$ 319.00			
100	109-H91	BLACK KID ANGEL TOUCH	\$ 7.10	\$ 710.00			
100	109-H92	GREEN KID ANGEL TOUCH	\$ 7.10	\$ 710.00			
T							
ORDER COMPLETE							
			DISCOUNTS	2%	\$ 65.23		
			PREPAID TRANS.		\$ 104.96		
			TOTAL		\$ 3301.23		
						2K/30/60	



THE KEYDATA CENTRAL COMPUTER GENERATES DATA SHOWN IN RED

ALERTS YOU TO INVENTORY STATUS

BACK ORDER INFORMATION

ALERTS YOU TO CUSTOMER CREDIT STATUS

ACCURATE

OPERATOR & COMPUTER INTERCOMMUNICATE VIA DIRECT TELEPHONE LINE

OPERATOR SPEED IS INCREASED BY INSTANTANEOUS COMPUTER RESPONSE

CHARLES W. ADAMS ASSOCIATES, INC. and KEYDATA CORPORATION
 STATEMENT OF FINANCIAL POSITION CONSOLIDATED
 January 31, 1964 and October 31, 1963

	<u>January</u> 31, 1964	<u>October</u> 31, 1963	<u>Increase</u> <u>(Decrease)</u>
ASSETS			
Current Assets:			
Cash	\$19,905.13	\$50,698.23	\$(30,793.10)
Accounts receivable-trade	162,837.51	120,111.74	42,725.77
Less allowance for doubtful accounts	(4,500.00)	(4,500.00)	
Accounts receivable-other	1,628.47	1,703.59	(75.12)
Prepaid expenses	<u>6,834.61</u>	<u>5,350.76</u>	<u>1,483.85</u>
Total Current Assets	186,705.72	173,364.32	13,341.40
Fixed Assets:			
Furniture, fixtures, leasehold improvements and motor vehicle	42,607.00	42,146.30	460.70
Less allowance for depreciation	(13,120.21)	(9,966.59)	(3,153.62)
Other Assets:			
Copyrights	28,133.00	28,133.00	
Other	<u>1,391.38</u>	<u>1,404.51</u>	<u>(13.13)</u>
	<u>\$245,716.89</u>	<u>\$235,081.54</u>	<u>\$10,635.35</u>
LIABILITIES AND SHAREHOLDERS' EQUITY			
Current Liabilities:			
Accounts payable	36,969.76	28,776.37	8,193.39
Loans payable	3,927.36	3,927.36	
Accrued expenses	21,597.04	21,145.38	451.66
Deferred subscription income	<u>6,789.50</u>	<u>3,143.15</u>	<u>3,646.35</u>
Total Current Liabilities	69,283.66	56,992.26	12,291.40
Loans payable	9,851.18	10,505.74	(654.56)
Common stock, par value 1 cent, 1,000,000 shares authorized, 401,200 shares issued and out- standing at amounts paid in	150,400.00	150,400.00	
Retained Earnings	<u>16,182.05</u>	<u>17,183.54</u>	<u>(1,001.49)</u>
	<u>\$245,716.89</u>	<u>\$235,081.54</u>	<u>\$10,635.35</u>

CHARLES W. ADAMS ASSOCIATES, INC. and KEYDATA CORPORATION

INCOME STATEMENT CONSOLIDATED

Six Months Ended January 31, 1964

	Month Ended January 31, 1964	Five Months Ended Dec. 31, 1963	Six Months Ended January 31, 1964
Income:			
Project - services	\$74,081.26	\$337,421.17	\$411,502.43
Project - other	3,599.43	19,443.38	23,042.81
Computer Quarterly sales	8.17	9,616.00	9,624.17
Miscellaneous	13.20	545.12	558.32
	<u>77,702.06</u>	<u>367,025.67</u>	<u>444,727.73</u>
Expenses:			
Administrative	17,821.44	82,018.72	99,840.16
Project	31,012.63	131,827.99	162,840.62
Facility	7,580.75	35,369.14	42,949.89
Supplies	924.60	6,539.81	7,464.41
Indirect employee benefits	7,021.24	27,532.59	34,553.83
Promotional	1,492.76	14,520.14	16,012.90
Professional development	312.07	6,538.52	6,850.59
Computer operations	6,350.10	20,454.65	26,804.75
Program development	2,615.08	8,616.20	11,231.28
Computer Quarterly		8,566.28	8,566.28
Other	(961.67)	(348.64)	(1,310.31)
	<u>74,169.00</u>	<u>341,635.40</u>	<u>415,804.40</u>
Net Income	<u>\$ 3,533.06</u>	<u>\$25,390.27</u>	<u>\$28,923.33</u>

CHARLES W. ADAMS ASSOCIATES, INC. and KEYDATA CORPORATION

COMPARATIVE INCOME STATEMENTS CONSOLIDATED

Six Months Ended January 31, 1963, July 31, 1963 and January 31, 1964

	<u>Six Months Ended</u>		
	<u>January 31, 1963</u>	<u>July 31 1963</u>	<u>January 31, 1964</u>
Project income	\$223,041.35	\$382,302.33	\$434,545.24
Computer Quarterly sales	3,610.00	14,466.06	9,624.17
Miscellaneous	<u>433.65</u>	<u>251.82</u>	<u>558.32</u>
	<u>227,085.00</u>	<u>397,020.21</u>	<u>444,727.73</u>
Expenses:			
Administrative	44,956.11	99,832.79	99,840.16
Project	96,622.41	185,606.53	162,840.62
Facility	13,852.71	30,642.74	42,949.89
Supplies	7,593.69	11,728.86	7,464.41
Indirect employee benefits	19,562.05	25,894.77	34,553.83
Promotional	9,015.81	3,300.97	16,012.90
Professional development	1,756.80	218.88	6,850.59
Computer operations			26,804.75
Program development			11,231.28
Computer Quarterly	2,370.96	15,195.89	8,566.28
Other	<u>4,454.10</u>	<u>1,719.74</u>	<u>(1,310.31)</u>
	<u>200,184.64</u>	<u>374,141.17</u>	<u>415,804.40</u>
Net income	<u>\$26,900.36</u>	<u>\$22,879.04</u>	<u>\$28,923.33</u>

CHARLES W. ADAMS ASSOCIATES, INC. and KEYDATA CORPORATION

STATEMENT OF FINANCIAL POSITION IN CONSOLIDATION

At January 31, 1964

	<u>Adams Associates</u>	<u>Keydata Corporation</u>	<u>Adjustments and Eliminations Add (Deduct)</u>	<u>Consolidated</u>
ASSETS				
Current Assets:				
Cash	\$ 2,474.06	\$17,431.07		\$19,905.13
Accounts receivable-trade	128,560.50	34,277.01		162,837.51
Less allowance for doubtful accounts	(4,000.00)	(500.00)		(4,500.00)
Accounts receivable-other	1,628.47			1,628.47
Prepaid expense	<u>5,129.43</u>	<u>1,705.18</u>		<u>6,834.61</u>
Total Current Assets	133,792.46	52,913.26		186,705.72
Fixed Assets:				
Furniture, fixtures, lease- hold improvements & motor vehicle	26,083.42	16,523.58		42,607.00
Less allowance for depreciation	(8,796.29)	(4,323.92)		(13,120.21)
Other Assets:				
Advances to subsidiary corporation	16,828.48		\$(16,828.48) ²	
Investment in subsidiary corporation	28,000.00		(28,000.00) ²	
Copyrights		28,133.00		28,133.00
Other	<u>1,291.38</u>	<u>100.00</u>		<u>1,391.38</u>
	<u>\$197,199.48</u>	<u>\$93,345.92</u>	<u>\$(44,828.48)</u>	<u>\$245,716.89</u>
LIABILITY AND SHAREHOLDERS' EQUITY				
Current Liabilities:				
Accounts payable	22,329.79	14,639.97		36,969.76
Loans payable	3,927.36			3,927.36
Accrued expenses	11,342.26	10,254.78		21,597.04
Deferred subscription income	<u>6,789.50</u>			<u>6,789.50</u>
Total Current Liabilities	44,388.91	24,894.75		69,283.66
Loans Payable	9,851.18			9,851.18
Advances from parent corporation		16,828.48	(16,828.48) ²	
Common stock, par value 1 cent, 1,000,000 shares authorized, 401,200 shares issued and out- standing at amounts paid in	150,400.00			150,400.00
Common stock, no par, 2000 shares authorized, 1050 shares issued and outstanding at amts. paid in		51,875.00	(51,875.00) ¹	
Retained earnings	<u>(7,440.64)</u>	<u>(252.31)</u>	<u>23,875.00¹</u>	<u>16,182.05</u>
	<u>\$197,199.45</u>	<u>\$93,345.92</u>	<u>\$(44,828.48)</u>	<u>\$245,716.89</u>

CHARLES W. ADAMS ASSOCIATES, INC. and KEYDATA CORPORATION
 STATEMENT OF INCOME AND RETAINED EARNINGS IN CONSOLIDATION

For the Month Ended January 31, 1964

	<u>Adams Associates</u>	<u>Keydata Corporation</u>	Adjustments and Eliminations <u>Add (Deduct)</u>	<u>Consolidated</u>
Income:				
Project-services	\$42,787.70	\$32,718.55	\$(1,424.99) ³	\$74,081.26
Project-other	960.58	2,638.85		3,599.43
Miscellaneous	13.20	8.17		21.37
	<u>43,761.48</u>	<u>35,365.57</u>	<u>(1,424.99)</u>	<u>77,702.06</u>
Expenses:				
Administrative	12,510.27	6,361.16	(1,049.99) ³	17,821.44
Project	18,836.87	12,550.76	(375.00) ³	31,012.63
Facility	4,615.49	2,965.26		7,580.75
Supplies	666.31	258.29		924.60
Indirect employee benefits	4,959.34	2,061.90		7,021.24
Promotional	777.48	715.28		1,492.76
Professional development	248.90	63.17		312.07
Computer operation		6,350.10		6,350.10
Program development		2,615.08		2,615.08
Other	(692.31)	(269.36)		(961.67)
	<u>41,922.35</u>	<u>33,671.64</u>	<u>(1,424.99)</u>	<u>74,169.00</u>
Net income	1,839.13	1,693.93		3,533.06
Retained earnings December 31, 1963	<u>(9,279.77)</u>	<u>(1,946.24)</u>	<u>23,875.00¹</u>	<u>12,648.99</u>
Retained earnings January 31, 1964	<u>\$ (7,440.64)</u>	<u>\$ (252.31)</u>	<u>\$23,875.00</u>	<u>\$16,182.05</u>

CHARLES W. ADAMS ASSOCIATES, INC. and KEYDATA CORPORATION

ADJUSTMENTS AND ELIMINATIONS

January 31, 1964

	(1)		
Common stock - Keydata Corporation		\$51,875.00	
Investment in subsidiary			\$28,000.00
Retained earnings (at acquisition)			23,875.00
(to eliminate investment in subsidiary)			
	(2)		
Advances from parent		16,828.48	
Advances to subsidiary			16,828.48
(to eliminate inter-company borrowing)			
	(3)		
Project income - services		1,424.99	
Administrative expense			1,049.99
Project expense			375.00
(to eliminate inter-company transaction)			

CHARLES W. ADAMS ASSOCIATES, INC.

INCOME STATEMENT

Six Months Ended January 31, 1964

	Month Ended January 31, <u>1964</u>	Five Months Ended Dec. <u>31, 1963</u>	Six Months Ended Jan. <u>31, 1964</u>
Income:			
Project - services	\$42,787.70	\$208,465.82	\$251,253.52
Project - other	960.58	10,212.62	11,173.20
Computer Quarterly Sales		9,616.00	9,616.00
Miscellaneous	<u>13.20</u>	<u>516.99</u>	<u>530.19</u>
	<u>43,761.48</u>	<u>228,811.43</u>	<u>272,572.91</u>
Expenses:			
Administrative	12,510.27	61,881.42	74,391.69
Project	18,836.87	82,864.02	101,700.89
Facility	4,615.49	19,684.77	24,300.26
Supplies	666.31	4,731.80	5,398.11
Indirect employee benefits	4,959.34	19,597.36	24,556.70
Promotional	777.48	13,713.84	14,491.32
Professional development	248.90	6,409.06	6,657.96
Computer Quarterly		8,735.03	8,735.03
Other	<u>(692.31)</u>	<u>(153.24)</u>	<u>(845.55)</u>
	<u>41,922.35</u>	<u>217,464.06</u>	<u>259,386.41</u>
Net income	<u>\$1,839.13</u>	<u>\$11,347.37</u>	<u>\$13,186.50</u>

KEYDATA CORPORATION

INCOME STATEMENT

Six Months Ended January 31, 1964

	Month Ended January 31 <u>1964</u>	Five Months Ended Dec. <u>31, 1963</u>	Six Months Ended Jan. <u>31, 1964</u>
Income:			
Project - services	\$32,718.55	\$175,901.15	\$208,619.70
Project - other	2,638.85	9,230.76	11,869.61
Miscellaneous	<u>8.17</u>	<u>28.13</u>	<u>36.30</u>
	<u>35,365.57</u>	<u>185,160.04</u>	<u>220,525.61</u>
Expenses:			
Administrative	6,361.16	20,318.55	26,679.71
Project	12,550.76	83,070.52	95,621.28
Facility	2,965.26	15,684.37	18,649.63
Supplies	258.29	1,808.01	2,066.30
Indirect employee benefits	2,061.90	7,935.23	9,997.13
Promotional	715.28	2,599.62	3,314.90
Professional development	63.17	129.46	192.63
Computer operations	6,350.10	23,919.43	30,269.53
Program development	2,615.08	15,847.35	18,462.43
Other	<u>(269.36)</u>	<u>(195.40)</u>	<u>(464.76)</u>
	<u>33,671.64</u>	<u>171,117.14</u>	<u>204,788.78</u>
Net Income	<u>\$ 1,693.93</u>	<u>\$14,042.90</u>	<u>\$15,736.83</u>

CHARLES W. ADAMS ASSOCIATES, INC.

EXPLANATION OF VARIANCE IN NET INCOME

January, 1964 vs December, 1963

Net income for month ended January 31, 1964		\$ 1,839
Net (loss) for month ended December 31, 1963		<u>(5,774)</u>
Increase		<u>\$ 7,613</u>
Increase resulted from:		
Project income from services ¹ :		
January, 1964	\$42,788	
December 1963	<u>35,921</u>	6,867
Project income - other:		
January, 1964	960	
December 1963	<u>6,167</u>	(5,207)
Miscellaneous income:		
January, 1964	13	
December 1963	<u>73</u>	(60)
Operating expenses (exclusive of Computer Characteristics Quarterly):		
January, 1964	41,922	
December 1963	<u>48,980</u>	7,058
Net income in mailing of December Computer Quarterly:		
Sales	5,164	
Cost	<u>4,119</u>	<u>(1,045)</u>
		<u>\$ 7,613</u>

¹For detail see schedule

CHARLES W. ADAMS ASSOCIATES, INC.

GROSS AVAILABLE INCOME FROM SERVICE VS ACTUAL INCOME

Months Ended January 31, 1964 and December 31, 1963

	<u>January 31</u>	<u>December 31</u>
Income available at commercial rates ¹	\$52,420	\$48,900
Less normal allowance for vacation	(1,980)	(1,940)
Adjustment to a 21-day month ²	<u>(2,380)</u>	<u> </u>
Gross available income from services in average month	<u>48,060</u>	<u>46,960</u>
Additional revenue due to:		
Work performed by other than technical	780	2,302
Work performed by Keydata employees	1,580	1,303
Vacation (below normal)	1,440	1,162
Overtime	3,050	226
Adjustment to a 21-day month ²	2,380	
Adjustment of October loss billed in January	680	
Unexplained difference	<u>8</u>	<u>22</u>
	<u>9,918</u>	<u>5,015</u>
Revenue lost due to:		
Sick leave	580	1,177
Administration and other	3,430	8,508
Difference between government rates and commercial rates	4,810	4,675
Loss on fixed price projects	<u>6,370</u>	<u>1,694</u>
	<u>15,190</u>	<u>16,054</u>
Actual income from services	<u>\$42,788</u>	<u>\$35,921</u>

¹This is assuming all technical employees work eight hours a day on a billable project.

²There were 22 work days in the month of January. The average work month has 21 work days.

KEYDATA CORPORATION

Explanation of Variance in Net Income

January 1964 vs December 1963

Net income for month ended January 31, 1964		\$1,694
Net income for month ended December 31, 1963		<u>5,124</u>
(Decrease)		<u>(3,430)</u>
Decrease resulted from:		
Project income from services ¹		
January 1964	32,719	
December 1963	<u>30,848</u>	1,871
Project income other:		
January 1964	2,639	
December 1963	<u>1,507</u>	1,132
Miscellaneous income		
January 1964	8	
December 1963	<u>3</u>	5
Operating expenses:		
January 1964	33,672	
December 1963	<u>27,234</u>	(6,438)
		\$ <u>(3,430)</u>

¹For detail see schedule

KEYDATA CORPORATION

GROSS AVAILABLE INCOME FROM SERVICES VS ACTUAL INCOME

Months Ended January 31, 1964 and December 31, 1963

	<u>January 31</u>	<u>December 31</u>
Income available at commercial rates	\$39,580	\$37,870
Less normal allowance for vacation	(1,500)	(1,500)
Adjustment to a 21-day month ¹	<u>(1,800)</u>	<u> </u>
Gross available income from services in average month	<u>36,280</u>	<u>36,370</u>
Additional revenue due to:		
Computer and miscellaneous billings	5,000	5,600
Overtime	7,110	2,960
Vacations below normal	1,400	1,300
Adjustment to a 21-day month ¹	1,800	
Unexplained difference	<u>89</u>	<u> </u>
	<u>15,399</u>	<u>9,860</u>
Revenue lost due to:		
Program development	8,900	8,420
Computer operations	810	670
Sick leave	720	1,450
Administration and other	7,730	4,800
Loss on fixed price projects	570	
Billing rate less than commercial rate	230	
Unexplained difference	<u> </u>	<u>42</u>
	<u>18,960</u>	<u>15,382</u>
Actual income from services	<u>\$32,719</u>	<u>\$30,848</u>

¹ There were 22 work days in the month of January. The average work month has 21 work days.

HEA

September 1, 1965

Mr. John T. Gilmore, Jr.
Vice President
Charles Adams Associates
575 Technology Square
Cambridge, Massachusetts

Dear Jack:

Enclosed is the information sent to our branch managers on August 6, 1965 concerning the PDP-6 at Keydata. I would prefer that you not copy and distribute to your personnel this internal memoranda of ours but I did want you to know what information was in it.

I was sorry to learn of your decision about DECUS but I can understand the factors affecting your decision.

Sincerely,

Harlan E. Anderson
Vice President

HEA:ecc

Enclosure: August 6 Statement on PDP-6 at Keydata

C
O
P
Y

8/6/65

TO: All DEC Sales Office Branch Managers

The PDP-6 at Keydata (Adams Associates) has at their request been pulled out.

The basic reason for this situation is that we were unable to get the Adams machine up and running steadily in a short enough time. The machine was four months overdue. For a company such as Keydata, which depends on the earnings from its machine, this is a severe problem and they were not able to tolerate it.

As you know, an overdue period such as the above, while deplorable, is not exactly unusual in our industry. The reasons for our slowness in bringing the machine to a state of readiness are these:

- 1) This is the most extensive system we have ever sold and its very size created some problems, which took a while to solve.
- 2) At Adams' request, certain special items were supplied and these put considerable strain on our capabilities to meet the dates earlier agreed on.

You will almost certainly be asked about this incident by customers and potential customers so here's how to handle it:

- 1) Be very careful to say nothing negative about Adams Associates or Keydata.
- 2) Mention the above points frankly and without elaboration.
- 3) Point out that this is the first (and we trust the last) time this has ever happened to the PDP-6.
- 4) Mention other systems we have in and running, i.e.:

Project MAC
U. of Western Australia
Brookhaven Nat'l. Laboratory
Rutgers University

Lawrence Radiation Laboratory
RAND Corp
University of Bonn
Aachen Physics Institute

Some of the lessons we have learned from this episode are already being translated into action.

- 1) All modifications made on the Adams machine will be retro-fitted onto all other machines in the field as soon as possible. There will, of course, be no charge to any customer. These modifications will also be added to all present and future machines in production.
- 2) In-house acceptance test procedures are being considerably toughened.
- 3) An advertising campaign will be launched in September with the specific intent of mentioning our important customers with highly reliable systems.

In closing, let me say that we expect lots of good to come out of all this - we have learned some lessons very well.

Prescott Behn
Marketing Manager
Large Computer Division

PB/b

7/15/65
RJB

AGREEMENT

Digital Equipment Corporation, 146 Main Street, Maynard, Massachusetts (DEC) agrees to lease to Charles W. Adams Associates, Inc., 142 The Great Road, Bedford, Massachusetts (herein after referred to as the customer) a PDP-6 computer system consisting of the items of equipment listed on Exhibit A hereto (herein after collectively called equipment) on the terms herein after set forth.

This equipment lease with option to purchase supercedes earlier agreements relating to a similar system. DEC and the customer agree that their respective rights and obligations are set forth in their entirety in this agreement and any amendments hereto.

All of the equipment (with minor exceptions) has been delivered to and will be located at 575 Technology Square, Cambridge, Massachusetts.

I. Terms and Condition of Lease

Term of Lease:

This lease shall continue in effect for one year for all of the equipment from the date of acceptance of the equipment. It may be terminated by the customer with respect to any item of equipment at the end of said year or at the end of any calendar month thereafter provided written notice is received by DEC three months prior to the termination date.

Monthly Rental Charges:

The monthly rental charges plus the special maintenance service fee for the equipment as specified in Exhibit A begin on August 4, 1965 provided, however, that until the operating speed of the Central Processor (Type 166), Fast Memory (Type 162), and Core Memories (Type 163C) shall reach the operating speed set forth in DEC publication F-65 (Change #3) the monthly

rental charge payable shall be reduced by \$3808.00, provided further, however, that since the Drum System (Type 167/236/237) presently installed is operating at one-half the capacity and transfer rate originally specified, the monthly rental charge payable shall be further reduced by \$1833.33. The total monthly charge for each month will be invoiced in advance on the first day of the month and each such invoice will be payable in full within 30 days of the date of the invoice without discount. August rental will be 20/22 of normal monthly rental charge. If for any month, prior to the date of acceptance, there shall occur more than one penalty Down Day, then the monthly rental charges for such month shall be waived.

There shall be added to the above monthly rental charges amounts equal to any taxes however designated, levied, or based on such charges or on this lease or on the equipment or their use including state and local privilege or excise taxes based on gross revenue and any taxes or amounts in lieu thereof paid or payable by DEC and respect of the foregoing exclusive, however, of taxes based on the net income of DEC.

Date of Acceptance:

The date of acceptance shall be the first day following a successful completion of the Special Acceptance Test.

The Special Acceptance Test involves the operation of the equipment using the Customer's program KOP-3 with only one Acceptance Down Day in any 20 consecutive business days (i.e., Monday through Friday inclusive, excluding holidays).

"Acceptance Down Day" is any day in which the equipment is subject to Down Time of more than three hours.

"Down Time" is defined as that time during the period 6:00 a.m. to 12:00 p.m. Monday through Friday excluding holidays during which equipment malfunction makes it impossible for the Customer to provide on line real time service to any of Customer's subscribers. In addition to the actual time, there shall be added an additional 30 minutes for each interruption of service except that such 30 additional minutes shall not be added to the first interruption in any one day. Customer agrees to provide a competent programmer, familiar with the KOP-3 System, to aid in distinguishing between equipment malfunctions and program malfunctions. Delay in providing such aid shall not be considered Down Time.

Daily Penalty Prior to Date of Acceptance:

For each Penalty Down Day occurring on or after August 4, 1965 and prior to November 4, 1965, DEC shall pay to the customer the amount of \$2,000.

"Penalty Down Day" is a day occurring from August 4 to September 3, 1965 in which the equipment is subject to Down Time of more than nine hours, from September 4 to October 3, time involved is six hours, and from October 4 to November 3 the time involved is three hours.

Cancellation Prior to Date of Acceptance:

Prior to the date of acceptance, the Customer may cancel this agreement without cause by delivering notice of cancellation to DEC, and DEC shall then be obligated to remove all of the equipment from the Customer's location. Such cancellation shall be without further obligation or liability on the part of the Customer or DEC for damages arising out of or in connection with this agreement.

DEC may, prior to the date of acceptance, cancel this agreement without cause by delivering notice of cancellation to the customer and on payment to the customer of liquidated damages of \$30,000. Such cancellation shall be without further obligation or liability on the part of DEC or the Customer for damages arising out of or in connection with this agreement.

Supplies:

All supplies used in conjunction with the equipment are to be provided by the Customer and shall meet DEC specifications.

Maintenance:

DEC will install the equipment at no additional cost to the Customer. The Customer will supply suitable building space, power, lighting, and air conditioning for the equipment and give DEC staff free access to the equipment for installation and testing prior to date of acceptance.

DEC will keep the equipment in good working order and will make all necessary adjustments and repairs. In consideration of the fact that Customer intends to offer on-line, real-time data processing services during the hours between 7:00 a.m. and 10:00 p.m. on normal weekdays and 7:00 a.m. to 1:00 p.m. on Saturday, DEC agrees to perform all maintenance of a nonemergency nature (i.e., scheduled preventive maintenance and maintenance required to correct degeneration of performance of equipment items where such degeneration has not resulted in significant interference with normal on-line operation) during the hours outside of Customer's on-line service period and to have appropriate personnel on call and located within or in close proximity to the area known as Technology Square, Cambridge, Massachusetts between the hours of 7:00 a.m. and 10:00 p.m. Monday through Friday, and Customer agrees to pay

a special maintenance service fee equal to 2-1/2% of the monthly rental charge. DEC will use its best efforts to perform preventive maintenance and routine equipment checks during the periods 6:00 a.m. to 7:00 a.m. and 10:00 p.m. to 12:00 p.m., Monday through Friday. DEC reserves the right to make adjustments in the special maintenance service fee after the first 12-month rental period. DEC shall give the Customer written notice at least 30 days in advance of such adjustment.

Penalty After Date of Acceptance:

Recognizing the importance to the Customer of Customer's proposed on-line, real-time operation, DEC agrees to refund a portion of the monthly rental charge in the event that equipment malfunction significantly interferes with the Customer's ability to perform on-line, real-time operations. Such refund will be subject to the following terms and conditions:

1. "Down Time" is defined as that time during which equipment malfunction makes it impossible for the Customer to provide on-line, real-time service, except that malfunctions that occur within three months after date of acceptance of the malfunctioning item shall not be considered down time for the purposes of this paragraph. During Down Time, DEC shall exercise complete control of the Type 166 Arithmetic Processor.
2. "Working day" is defined as the period between 8:00 a.m. and 6:00 p.m., Monday through Fridays (excluding holidays). For the purpose of calculating refunds, each calendar month is considered to contain 22 working days.

3. For every period of two or more consecutive working days during which the down time each day exceeds one-half of the working day (i.e., more than five hours out of the ten hours), DEC agrees to refund to Customer an amount equal to $1/22$ of the monthly rental charge times the number of days involved.

DEC shall have complete and free access to the equipment. Charges for any repairs or replacements due to the negligence of the Customer will be borne by the Customer. Suitable electric current to operate electrically operated equipment and a suitable place of installation with all facilities as specified by DEC will be furnished by the Customer.

Insurance:

DEC and its insurers, if any, shall relieve the Customer of all risk of loss of or damage to the equipment from the date this agreement is signed and during the term of this lease, however occasioned.

Alterations and Attachments:

Upon prior written authorization from DEC, alterations in or attachments to the equipment may be made. If the alteration or attachment interferes with the normal and satisfactory operation or maintenance of the equipment in such a manner as to increase substantially the cost of maintenance thereof, or create a safety hazard, the Customer will, upon notice from DEC to that effect, promptly remove the alteration or attachment and restore the equipment to its normal condition.

Transportation and Traveling Expenses:

All transportation and rigging charges for the equipment, both from and to the DEC plant, are to be paid by the Customer. Packing cases for the equipment and a representative to supervise the packing and unpacking will be furnished by DEC without charge. The equipment covered by this agreement is not to be moved from the location stated on the first page hereof without the prior written consent of DEC which consent will not be unreasonably withheld. The Customer will furnish such labor as may be necessary to change location when the equipment is in the possession of the Customer.

Warranty:

DEC warrants that the equipment, when installed, will be in good working order, and free of manufacturing, materials, and design defects. All equipment is supplied subject to these warranties, and DEC's obligation thereunder is limited to repair or replacement of any parts of the equipment when DEC determines that the equipment does not conform to these warranties.

The foregoing warranties are in lieu of all other warranties expressed or implied, and of all obligations or liabilities on the part of DEC for damages, including but not limited to consequential damages arising out of or in connection with the use or performance of the equipment.

Miscellaneous:

The equipment remains the personal property of DEC and may be removed by DEC at any time after the termination of this lease, except to the extent that the Customer elects to exercise the option to purchase provided below. The Customer shall not do, permit or suffer any act or thing whereby DEC's title or right to the equipment may be encumbered or impaired. DEC shall have the right to mark or label the equipment adequately to evidence its

ownership, such markings being adequate to meet legal requirements for establishing ownership but otherwise as inconspicuous as possible and of adequate dignity and decorum.

II. Terms and Conditions of Option to Purchase

DEC grants to the Customer a nonassignable option to purchase from DEC on the following terms and conditions all of the equipment described on Exhibit A hereto.

The Customer may exercise the option to purchase all of the equipment to take effect on or after date of acceptance by written notice to DEC referring to this agreement.

The option for the equipment is valid only as long as the equipment continues under the lease arrangement established in Part I of this agreement until the effective date of purchase hereunder.

If the option is exercised, it must be exercised for all of the equipment. If the Customer elects to exercise the option to purchase, the purchase will be subject to the terms and conditions of purchase which follows.

III. Terms and Condition of Purchase

Effective Date of Purchase:

A purchase shall be effective on or after date of acceptance on the day following receipt by DEC of the Customer's written notice of exercise of the option. Equipment purchased will be discontinued under the lease arrangement established in Part I of this agreement as of the day immediately preceding such effective date. The Customer shall pay all charges with respect to such equipment due under the lease arrangement.

Price:

The price for the equipment shall be the purchase price set forth in Exhibit A hereto less a credit equal to the sum of (1) 75 per cent of the total rental charges (not including Special Maintenance Service Fees) paid by the Customer under this equipment lease in respect of the period prior to the expiration of 12 months from the date of acceptance and (2) 50 per cent of the total rental charges (not including Special Maintenance Service Fees) paid by the Customer in respect of equipment for the 24-month period following the period specified in Clause 1. No credit is available in respect of rental charges paid after 36 months from date of acceptance.

There shall be added to the above price an amount equal to any taxes, however designated, levied or based on such price or on this agreement or the equipment, including state and local privilege or excise taxes based on gross revenue, and any taxes or amounts in lieu thereof paid or payable by DEC in respect of the foregoing, exclusive, however, of taxes based on net income.

Terms of Payment:

Payment for the equipment shall be made in full within thirty days after the date of invoice. The invoice shall be dated as of the effective date of purchase.

Title:

Title to the equipment is to remain in DEC until the full purchase price is paid. Failure to pay the purchase price of the equipment when due shall give DEC the right, without liability, to repossess such equipment, with or without notice, and to avail itself of any legal remedy.

Risk of Loss:

During the period the equipment is in transit or in possession of the Customer up to the effective purchase date, DEC and its insurers, if any, relieve the Customer of all risk of loss of or damage to the equipment. After the effective date of purchase, the risk of loss or damage shall be on the Customer.

Warranty:

DEC warrants the equipment purchased to be in good working order on the effective date of purchase.

DEC will keep any item of equipment which has been installed for less than one hundred eighty days under the lease arrangement established in Part I of this agreement in good working order through the one hundred eightieth day after date of acceptance. At the Customer's request during the warranty period, DEC will make all necessary adjustments, repairs and parts replacements. All replaced parts will become the property of DEC on an exchange basis. This warranty will not apply if such adjustment, repair or parts replacement is required because of accident, neglect, misuse, failure of electric power, of air conditioning, or of humidity control or causes other than ordinary use, caused by someone other than DEC. Neither shall it apply to any equipment modified without the approval of DEC or to damage caused by transportation by someone other than DEC.

DEC shall have full and free access to the equipment to perform this service. DEC shall not be responsible for failure to render service due to causes beyond its control. This warranty shall apply only to the original Customer. DEC shall not be required to adjust or repair any piece of equipment or part if alterations or attachments interfere with normal safe access.

The foregoing warranties are in lieu of all other warranties expressed or implied, and of all obligations or liabilities on the part of DEC for damages, including but not limited to consequential damages arising out of or in connection with the use or performance of the equipment.

Maintenance Service and Parts:

DEC will, if requested, provide the Customer with maintenance service for the equipment after the exercise of the option to purchase, and repair or replace parts, as long as they are generally available, on the basis of DEC's established prices and terms prevailing at the time.

Patent:

DEC shall indemnify the Customer against liability, including costs arising out of claims that any of the items of equipment or any parts thereof covered by this agreement infringe any United States Letters Patent. The foregoing indemnity shall not apply unless DEC shall have been informed as soon as practicable by the Customer of the suit or action alleging such infringement, and shall have been given opportunity to participate in the defense thereof.

IV. General

Twenty copies of the manuals describing the software will be provided to the Customer without additional charge. A reasonable number of additional copies including subsequent additions and corrections will also be supplied in the future. Two copies of the Maintenance Manual will be provided on installation.

Neither this agreement nor any of Customer's rights hereunder shall be assignable except with the written consent of DEC, and the terms and conditions hereof shall bind any permitted successors and assigns of the Customer. If DEC assigns the rents reserved herein, or all or any of its other rights hereunder, the rights of its assignee shall be independent of any claim of the Customer against DEC; the Customer on receiving notice of any such assignment shall abide thereby and make payment as may therein be directed.

This agreement shall be governed by the laws of the Commonwealth of Massachusetts. This constitutes the entire agreement between the Customer and DEC with respect to the lease and the purchase and sale of the equipment and no representation or statement not contained in this agreement shall be binding upon DEC as a warranty or otherwise. The foregoing terms and conditions shall prevail notwithstanding any variance with the terms and conditions of any prior agreements between DEC and the Customer in respect of the equipment.

CHARLES W. ADAMS ASSOCIATES, INC.

By _____
(Signature)

Date _____

Accepted By:

DIGITAL EQUIPMENT CORPORATION

By _____

Date _____

EXHIBIT A

Quantity	Description	Purchase * Price	Monthly Rental * Charge
1	Type 166 Arithmetic Processor including monitor typewriter, high speed paper tape reader	\$155,100	\$5,170.000
3	Type 163C Core Memories (12% Discount) includes two memory bus interfaces for each memory	\$339,768	\$12,870.000
1	Type 162 Fast Memory	\$ 30,000	\$ 1,000.000
2	Type 136 Data Control	\$ 20,000	\$ 666.666
1	Type 516/521 Magnetic Tape Control	\$ 18,000	\$ 600.000
2	Type 570 Magnetic Tape Transport	\$ 60,800	\$ 2,026.666
1	Type 646 Line Printer	\$ 30,000	\$ 1,000.000
1	Type 461 Card Reader	\$ 16,500	\$ 550.000
1	Type 551 DEctape Control	\$ 14,000	\$ 466.666
1	Type 555 DEctape Transport	\$ 7,400	\$ 246.666
1	Type 167 I. O. Processor	\$ 22,000	\$ 733.333
1	Type 236 Drum Control	\$ 13,000	\$ 433.333
1	Type 237 Magnetic Drum	\$ 75,000	\$ 2,500.000
1	Type 390 Memory Cycle Counter	\$ 4,700	\$ 156.666
1	Type 630 Data Communications System	\$ 27,914	\$ 930.466
1	Type 270 Disc	\$140,000	\$ 4,666.666
3	Core Memory Parity Check	\$ 15,840	\$ 600.000
		<u>\$990,022</u>	<u>\$34,617.130</u>

Special Maintenance Service Fee

\$ 865.43

Total Monthly charge

\$35,482.56

* Purchase prices include any applicable discounts.

Monthly rental charges are based on non-discounted retail prices.

ownership, such markings being adequate to meet legal requirements for establishing ownership but otherwise as inconspicuous as possible and of adequate dignity and decorum.

II. Terms and Conditions of Option to Purchase

DEC grants to the Customer a nonassignable option to purchase from DEC on the following terms and conditions all of the equipment described on Exhibit A hereto.

The Customer may exercise the option to purchase all of the equipment to take effect on or after date of acceptance by written notice to DEC referring to this agreement.

The option for the equipment is valid only as long as the equipment continues under the lease arrangement established in Part I of this agreement until the effective date of purchase hereunder.

If the option is exercised, it must be exercised for all of the equipment. If the Customer elects to exercise the option to purchase, the purchase will be subject to the terms and conditions of purchase which follows.

III. Terms and Condition of Purchase

Effective Date of Purchase:

A purchase shall be effective on or after date of acceptance on the day following receipt by DEC of the Customer's written notice of exercise of the option. Equipment purchased will be discontinued under the lease arrangement established in Part I of this agreement as of the day immediately preceding such effective date. The Customer shall pay all charges with respect to such equipment due under the lease arrangement.

Price:

The price for the equipment shall be the purchase price set forth in Exhibit A hereto less a credit equal to the sum of (1) 75 per cent of the total rental charges (not including Special Maintenance Service Fees) paid by the Customer under this equipment lease in respect of the period prior to the expiration of 12 months from the date of acceptance and (2) 50 per cent of the total rental charges (not including Special Maintenance Service Fees) paid by the Customer in respect of equipment for the 24-month period following the period specified in Clause 1. No credit is available in respect of rental charges paid after 36 months from date of acceptance.

There shall be added to the above price an amount equal to any taxes, however designated, levied or based on such price or on this agreement or the equipment, including state and local privilege or excise taxes based on gross revenue, and any taxes or amounts in lieu thereof paid or payable by DEC in respect of the foregoing, exclusive, however, of taxes based on net income.

Terms of Payment:

Payment for the equipment shall be made in full within thirty days after the date of invoice. The invoice shall be dated as of the effective date of purchase.

Title:

Title to the equipment is to remain in DEC until the full purchase price is paid. Failure to pay the purchase price of the equipment when due shall give DEC the right, without liability, to repossess such equipment, with or without notice, and to avail itself of any legal remedy.

Risk of Loss:

During the period the equipment is in transit or in possession of the Customer up to the effective purchase date, DEC and its insurers, if any, relieve the Customer of all risk of loss of or damage to the equipment. After the effective date of purchase, the risk of loss or damage shall be on the Customer.

Warranty:

DEC warrants the equipment purchased to be in good working order on the effective date of purchase.

DEC will keep any item of equipment which has been installed for less than one hundred eighty days under the lease arrangement established in Part I of this agreement in good working order through the one hundred eightieth day after date of acceptance. At the Customer's request during the warranty period, DEC will make all necessary adjustments, repairs and parts replacements. All replaced parts will become the property of DEC on an exchange basis. This warranty will not apply if such adjustment, repair or parts replacement is required because of accident, neglect, misuse, failure of electric power, of air conditioning, or of humidity control or causes other than ordinary use, caused by someone other than DEC. Neither shall it apply to any equipment modified without the approval of DEC or to damage caused by transportation by someone other than DEC.

DEC shall have full and free access to the equipment to perform this service. DEC shall not be responsible for failure to render service due to causes beyond its control. This warranty shall apply only to the original Customer. DEC shall not be required to adjust or repair any piece of equipment or part if alterations or attachments interfere with normal safe access.

The foregoing warranties are in lieu of all other warranties expressed or implied, and of all obligations or liabilities on the part of DEC for damages, including but not limited to consequential damages arising out of or in connection with the use or performance of the equipment.

Maintenance Service and Parts:

DEC will, if requested, provide the Customer with maintenance service for the equipment after the exercise of the option to purchase, and repair or replace parts, as long as they are generally available, on the basis of DEC's established prices and terms prevailing at the time.

Patent:

DEC shall indemnify the Customer against liability, including costs arising out of claims that any of the items of equipment or any parts thereof covered by this agreement infringe any United States Letters Patent. The foregoing indemnity shall not apply unless DEC shall have been informed as soon as practicable by the Customer of the suit or action alleging such infringement, and shall have been given opportunity to participate in the defense thereof.

IV. General

Twenty copies of the manuals describing the software will be provided to the Customer without additional charge. A reasonable number of additional copies including subsequent additions and corrections will also be supplied in the future. Two copies of the Maintenance Manual will be provided on installation.

Neither this agreement nor any of Customer's rights hereunder shall be assignable except with the written consent of DEC, and the terms and conditions hereof shall bind any permitted successors and assigns of the Customer. If DEC assigns the rents reserved herein, or all or any of its other rights hereunder, the rights of its assignee shall be independent of any claim of the Customer against DEC; the Customer on receiving notice of any such assignment shall abide thereby and make payment as may therein be directed.

This agreement shall be governed by the laws of the Commonwealth of Massachusetts. This constitutes the entire agreement between the Customer and DEC with respect to the lease and the purchase and sale of the equipment and no representation or statement not contained in this agreement shall be binding upon DEC as a warranty or otherwise. The foregoing terms and conditions shall prevail notwithstanding any variance with the terms and conditions of any prior agreements between DEC and the Customer in respect of the equipment.

CHARLES W. ADAMS ASSOCIATES, INC.

By _____
(Signature)

Date _____

Accepted By:

DIGITAL EQUIPMENT CORPORATION

By _____

Date _____

EXHIBIT A

Quantity	Description	Purchase * Price	Monthly Rental * Charge
1	Type 166 Arithmetic Processor including monitor typewriter, high speed paper tape reader	\$155,100	\$5,170.000
3	Type 163C Core Memories (12% Discount) includes two memory bus interfaces for each memory	\$339,768	\$12,870.000
1	Type 162 Fast Memory	\$ 30,000	\$ 1,000.000
2	Type 136 Data Control	\$ 20,000	\$ 666.666
1	Type 516/521 Magnetic Tape Control	\$ 18,000	\$ 600.000
2	Type 570 Magnetic Tape Transport	\$ 60,800	\$ 2,026.666
1	Type 646 Line Printer	\$ 30,000	\$ 1,000.000
1	Type 461 Card Reader	\$ 16,500	\$ 550.000
1	Type 551 DEctape Control	\$ 14,000	\$ 466.666
1	Type 555 DEctape Transport	\$ 7,400	\$ 246.666
1	Type 167 I. O. Processor	\$ 22,000	\$ 733.333
1	Type 236 Drum Control	\$ 13,000	\$ 433.333
1	Type 237 Magnetic Drum	\$ 75,000	\$ 2,500.000
1	Type 390 Memory Cycle Counter	\$ 4,700	\$ 156.666
1	Type 630 Data Communications System	\$ 27,914	\$ 930.466
1	Type 270 Disc	\$140,000	\$ 4,666.666
3	Core Memory Parity Check	\$ 15,840	\$ 600.000
		<u>\$990,022</u>	<u>\$34,617.130</u>

Special Maintenance Service Fee

\$ 865.43

Total Monthly charge

\$35,482.56

* Purchase prices include any applicable discounts.

Monthly rental charges are based on non-discounted retail prices.

Specifics

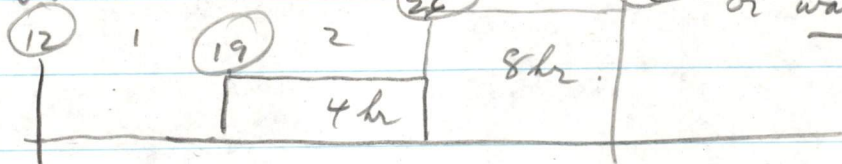
→ ①

History

- a.) Lack of parity,
- b.) memory speed up mod., Disc Drum I/O
Mag Tape.

②

Four Week Schedule



Acceptance
to begin
or wavies.

2a

Penalty

③

Revised Spec.

Drum } Rent reduced.
Speed }

④

Back Up.

630 to 680

Disc }
Drum }
5700 }
C.P. }
memories }

⑤

Personnel.

Programmer.

⑥

Plan of Operation

After acceptance all modes tested at OEC

→ ① 63.0 Buy back - ✓

② Pound the table - ✓

→ ③ Programmer = Leo Gossel. -

④ Back up

→ ③ { D. GROSS
* + +
KEYDATA }

Ken Senior.

Keydata.

1. Specs dropped to pre-speed up times / Rent dropped by 20% until speed up is accomplished.
2. Parity installed by _____.
3. Drum at 1/2 capacity and no charge until at full capacity.
4. DEC will install and use at DEC factory a disc and drum of the same kind as at Keydata.
5. Acceptance tests completed by Aug 15, or a penalty of ~~\$~~ \$1,000 / ^{working} day until acceptance is completed but total not to exceed \$60,000.
6. After acceptance use criteria in existing contract.
7. All ~~using~~ modifications to be tested at DEC prior to installation at Keydata after acceptance.
- 8.

1.

DEC
~~Home~~ Design Problems Priorities (#11)

1.

Memory

- A. Memory Starter with 37 lts
- B. 1664/1665 mods
- C. 6684
- D. 6131 (in CPU)
- E. Loading and Wire routing for inhibit drivers
- F. -15 MC on 163
- G. Redesign Speed up.

2.

CPU

- A. 6615
- B. 6203
- C. AT4 mod
- D. PI CYC B(0) Rings
- E. MA ← 0 margin
- F.

2

3. W 100 oscillates

4. DE Programming

A. Document Read Compare feature in DE dup

B. DE tape diagnostic

C. Fix loader parity error detection

D. Comprehensive System maintenance tests

5. Better cooling

6.

3

B

DEC Procedural Problems

1. Machine Performance
 - B. Better Log.
 - A. Better Definition
 - C. Good Status board.
2. Housekeeping procedures documentation.
3. Maintain trainy on DISC.
4. Format for recording adjustments.

4

~~Hom~~ Adams Design & Maint. Work.
Records
Priority

1. Memories

- A. Remove speedup mod in all memories
- B. Terminators and wiring
- C. MC RST1 termination
- D. Check memory for MC ADDR ACK
- E. PARITY
- F. Mark currents in memories

2. CPU.

- A. Margins

3. Magnetic Tape

- A. Motion fix
- B. 516 Design Review
- C. ~~Q 570~~ Adjustment Procedures

5.

4. Fortran II Magnetic Tape

5. DISC Bit pickup

6. SOLA'S on 555

7. 630 jacks

6. Line printer ~~paper~~

A. PAPER Pulley

B. weak hammer drives

Procedural Problems

1. Housekeeping

2. Maint Schedule following

3. Cabling diagram.

- Keydata. -

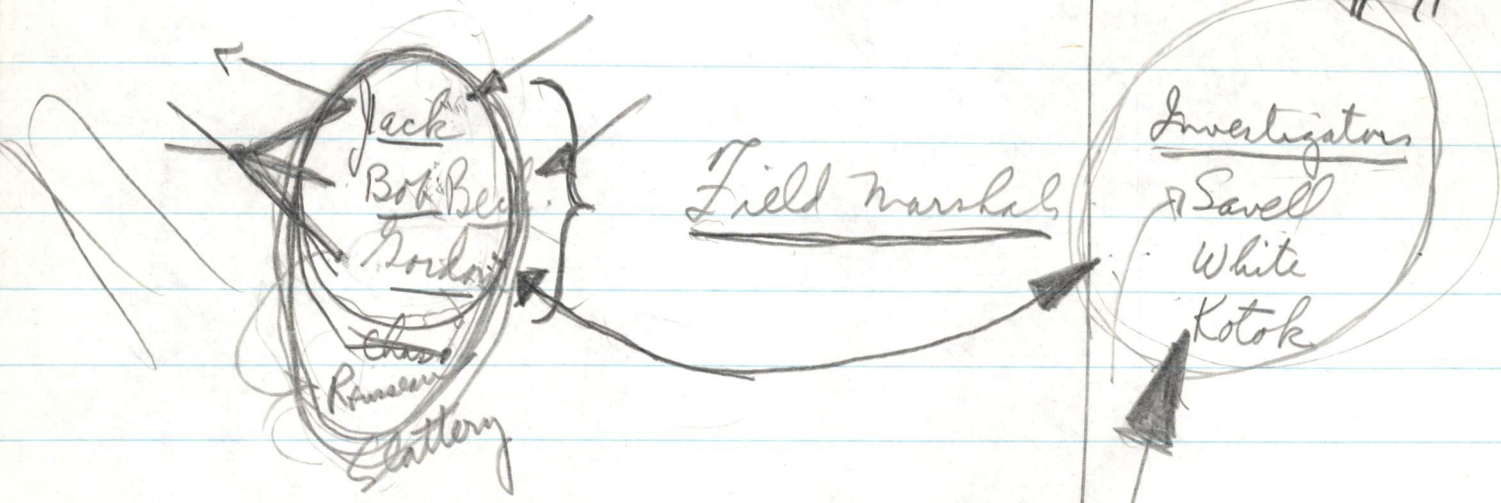
1. Fortran
2. Overall Performance
3. mag Tape Coverage. -
4. Pilot Operation.
- 5.

6:30

Paul Slattery

Key data

Page # 11



Continuity Crew

- Sullivan -
- Landry -
- Kilduff -

Specialists

- Mag Tape
- Disc
- Memory
- Circuits

Agenda

1. Schedule -

2. Cost - ^{75K Disc} 2 Mag Tape Type 570 30K ^{2-2 Acc Memories - 50K} ^{Drum - 60K}

3. Personnel assignments -

4. Contract Terms. - Penalty

✓ → 5. List of Problems

6. Performance Level of the machine. -

7. Effect on other things.

8. Plan of Action.
Spares -

Internal Thoughts.

1. Jack Shields & Field Service are quality control for PDP-6
2. All systems operated one month by them for customer are prior to shipment!
3. Gordon in charge of engineering.
4. Larry White & Bob Savell production engineering.
Leo Gossel maybe?
5. Production checkout does no mods without ECO
6. Standard settings for all adjustments to be documented.
7. ~~Only~~ contracts to be coordinated by marketing.
8. In past insufficient checks and balances have existed.
9. Tighter specs on modules.
10. Refurbish prototype!

Keydata Thoughts

1. Penalty on DEC for failure to provide reliability.
2. Adams claims it costs \$3,000/day if they are delayed.
Penalty could not be more than \$1,000/day
2. What should we do on performance? Should we backoff or speed up mode? Temporarily or permanently.
- 3. How about schedule? How do we measure reliability for purpose of penalty?
4. How long can penalty persist? If they order a different machine, they must tell us and we remove our machine immediately.
5. Why not just run the acceptance test on a certain date and have a penalty tied to this.
- 6. Parity on memory - McKelip -
- 7. 6684 Circuit Module - Low

1664 - 1665

K-2

- 8.) Buy a ^{Data Products} disc for DEC.
- 9.) Duplicate the drum -
- 10.) Ken Senior ^{or Jack Shields} at Keydata until the machine has run 2 months satisfactorily with no mods.
11. Gordon work at Keydata through the acceptance test
12. Kotok to design Burroughs disc interface!
13. Develop a record keeping system for reliability purposes.
14. ^{Bell} ~~Sandell~~ & White to work on Production Engineering.
Develop a better interface with Checkout.
15. Get a second PDP-6 for use in Production Testing of memory & peripherals: (Refurbish prototype)
16. Delay some computer deliveries if necessary!
17. Have Derrick become our memory man.

18.) Delay speed up mod. ??

19.) Savell ^{of Senior} at Keydata. - ???

20.) Let Keydata use system for free from acceptance until all specs are met (new speeds and 1×10^6 words of drum) Four months notice if we are not going to meet some spec.

21.) All ^{major} mods tested on DEC system first!

22. Should we put a spare processor at Keydata?
 " " " " memory at Keydata?

- ① \$500 / working day that we are late in completing the acceptance test for maximum of 4 months.
\$10,000 / month or \$40,000!
- ② Acceptance test to be done in 4 weeks with modified specs.
 - a) Speed not correct
 - b) Drum at half density.
 - c)
- ③ In addition, after acceptance ^{maybe more} \$100 / day for any day in which we don't meet the reliability test now in the contract.
- ④ Permission to cancel by either party with 4 months notice.
- ⑤ Adjustment of rent ~~due~~ ^{until} drum & processor speed are OK.
- ⑥ Adjustment of rent due to DEC using part of time.
- ⑦ There must be limited and provide an escape clause.

1. Spare parts
2. Order disc for DEC.
3. Order a drum for DEC.
4. Order a Type 570 tape transport

adams associates

Proposed Agreement with DEC

On July 2, 1965

1. Type 570 magnetic tape transports work reliably without excessive tape wear.
2. Type 237 drum with control, operating at half of rated density, is installed and works reliably.
3. DEC lends us the following equipment until October 31, 1965, at no charge.
 - (a) Central processor type 166 @ \$146,100 and fast memory type 162 @ \$30,000 (total \$176,100) and
 - (b) Drum system, including type 237 @ \$75,000, type 236 @ \$13,000 and type 167 @ \$22,000 (total \$110,000) operating at half of rated density
4. We buy remainder of system, approximately \$700,000 payable on July 31, 1965, under a purchase agreement including
 - (a) the excessive downtime warranty (if down more than five prime hours for more than one consecutive day, DEC meets our loan payment and maintenance payments for the days affected),
 - (b) the off-hours maintenance agreement (we pay 1% of purchasing price per year additional for maintenance after six months), and
 - (c) extra equipment options, augmented by options on delivery of type 680 data communications systems with 32 to 64 interfaces, on 60 days notice, one in each of the next calendar quarters commencing July 1, 1965, and on type 338 display system with 8K core and Data-phone interface on 60 days notice, one in each of two calendar quarters commencing January 1, 1965,
 - (d) DEC to credit our type 630 system in exchange for first type 680 at full price less \$2,500 for reconditioning.
5. Our first loan payment becomes due to Morgan Guaranty Trust Company on October 31 (including interest from July 31).

adams associates

On October 31, 1965

1. System has functioned reasonably satisfactorily (no more than 100 hours of unscheduled downtime in total between July 2 and October 31), or we may elect to return the entire system for full refund, or to hold same for up to six months while we obtain replacement, and then return it, with forfeiture only of loan payments made from November 1, 1965, to date of return.
2. Type 166 and 162 meets specification of February 1964, or DEC lends us duplicates until they do.
3. Type 237 drum meets specification, or DEC lends us duplicate of 237, 236 and 167 units until it does, or we pay one-half price for these components as is.
4. DEC accepts payment for above items in the form of a note bearing 6% interest, payable one-third on October 31, 1966, one-third on October 31, 1967, and the balance on October 31, 1968.
5. DEC lends us type 338 with 8K core and Dataphone interface until March 1, 1966 with option to buy if we notify by January 3, 1966.

The following refers to the items, by number, contained in the Adams Associates proposed agreement with DEC, delivered to DEC on 11 June 1965.

On July 2, 1965

Item 1: Acceptable

Item 2: Acceptable

Item 3: a. DEC does not feel that this is acceptable. It is our understanding that this is based on the feeling that the PDP-6 system operating speed does not meet specifications listed in F-65. These specifications were based on design information and were made at a time when specific measurements could not be obtained. F-65 clearly states that the timing flow chart will yield only approximate times. The new timing flow chart represents a firm specification based on actual measurements made on operating systems. While some instructions and the memory read access time are slower than originally estimated, other instructions and the memory cycle time are faster. The net result is a reduction of 10 per cent in the number of instructions performed per second when running a typical program. DEC feels that this is well within the meaning of the term "approximate".

At the present time, the Keydata installation is not running at the speeds specified by the new chart. The necessary modifications will be installed and the system will be up to specified speeds on or before 2 July.

b. Acceptable.

Item 4: Adams buys everything except drum system. Title to pass and invoice dated on or before 2 July. Our normal net 30 days terms would apply.

a. This is agreeable under the following conditions:

1. "Down time" and "working day" are defined as on page 7 of the existing lease contract.

2. For every period of 2 or more consecutive working days, during which the down time each day exceeds one-half of the working day, (i.e., more than 5 hours out of the 10 hours) DEC agrees to pay a penalty of \$200.00 for each day of down time.

3. This penalty clause shall apply only during the warranty period of the initial system and during periods when the entire system is covered by a DEC Maintenance Contract.

b. This is not agreeable to DEC as stated. One-shift maintenance service is included in the basic monthly rental price. The special maintenance service fee (equivalent to one per cent per year of the purchase price) covered the extension of this service as detailed in the existing lease contract. The PDP-6 warranty includes one-shift maintenance for the warranty period. The extended maintenance service can be provided during the warranty period for a fee of one-half of one per cent of the purchase price of the equipment. If Adams enters into a one-shift maintenance contract at the end of the warranty period, DEC will continue the extended service for an additional fee of one per cent per year of the purchase price of the equipment.

c. We would prefer to consider this separately and not as a part of the present negotiations.

d. This is not acceptable to DEC.

Item 5: Acceptable.

On October 1, 1965

Item 1. This is not agreeable to DEC. While we feel that the system will meet or exceed the reliability requirements indicated, we consider this too vague and unsatisfactory as a criteria for return of the entire system.

Item 2. Not acceptable. See comments concerning 3a on page 1.

Item 3. Agreeable, except that under these conditions the price will be adjusted to 60% of list price rather than 50%.

Item 4. This is not agreeable to DEC. We would consider a lease arrangement to cover the drum system.

Item 5. We would prefer to consider this as a separate item and not make it a part of the present negotiations.

Instruction	Instruction Duty Factor (%)	Original Estimates (Microseconds)	Present Specification (Microseconds)	Ratio (%)	Weighted Ratio (%)
Full & Half word moves	20	4.2	4.0	1.06	20.12
Full & Half word immediate	5	2.0	2.6	.77	3.85
LDB (7 Bits, 15 off set)	3	9.5	8.5	1.12	3.36
IDPB (7 Bits, 23 off set)	2	11.0	10.5	1.04	2.08
Block transfer	-	--	2 + 4n	--	--
Exchange	1	4.2	4.2	1.0	1.0
Fixed point add	4	4.1	4.4	.93	3.72
Fixed point subtract	2	4.3	4.6	.93	1.86
Fixed point multiply	1	15.9	20.0	.79	.79
Fixed point divide	1	24.3	28.0	.86	.87
Floating point add	5	7.2	9.3	.78	3.90
Floating point subtract	2	7.4	9.9	.75	1.50
Floating point multiply	2	13.7	20.0	.69	1.38
Floating point divide	1	19.7	27.0	.73	.73
Boolean	4	4.	4.1	.98	3.92
Shifting 1 word	3	2.4 + .15n	3.1 + .13n	.93	2.79
Shifting 2 words	1	3.4 + .15n	4.0 + .13n	.96	.96
AOSE	2	4.4	4.6	.96	1.98
AOJE	2	3.5	4.1	.85	1.70
Arithmetic compare (CAME)	2	4.6	4.9	.93	1.86
Logic compare (TLZE)	9	3.2	3.9	.82	7.38
Jumpint (JRST, JFCL)	12	2.9	2.9	.76	9.12
CONO	1	3.4	4.3	.77	.77
BLKI	4	7.7	8.1	.95	3.80
PUSHJ	11	4.7	4.65	1.01	11.11
				<u>21.38 =</u>	<u>90.55%</u>
				<u>24</u> 89%	

INSTRUCTION PERFORMANCE
1 - 163,162 MEMORIES

100 after admin sets up.

Primer act but OAF.

T₀

HANBINGUP →

T₁

Compu sends sig. Add ACT.

MA = MULTIPLY

U.S.C.
6/11/65

adams associates

Proposed Agreement with DEC

On July 2, 1965

- 1. Type 570 magnetic tape transports work reliably without excessive tape wear. OK
- 2. Type 237 drum with control, operating at half of rated density, is installed and works reliably. OK
- 3. DEC lends us the following equipment until October 31, 1965, at no charge.

No! →
Central Processor will be speeded up to meet new flow diagram.

- (a) Central processor type 166 @ \$146,100 and fast memory type 162 @ \$30,000 (total \$176,100) and — 90% of spec.
- (b) Drum system, including type 237 @ \$75,000, type 236 @ \$13,000 and type 167 @ \$22,000 (total \$110,000) operating at half of rated density — yes.

Title open on 2 July? and money on July 31.

150-200

4. We buy remainder of system, approximately \$700,000 payable on July 31, 1965, under a purchase agreement including

- (a) the excessive downtime warranty (if down more than five prime hours for more than one consecutive day, DEC meets our loan payment and maintenance payments for the days affected), Termination date!
- (b) the off-hours maintenance agreement (we pay 1% of purchasing price per year additional for maintenance after six months), and Maintenance Contract!
- (c) extra equipment options, augmented by options on delivery of type 680 data communications systems with 32 to 64 interfaces, on 60 days notice, one in each of the next calendar quarters commencing July 1, 1965, and on type 338 display system with 8K core and Data-phone interface on 60 days notice, one in each of two calendar quarters commencing January 1, 1965, 1966.

note

No!

(d) DEC to credit our type 630 system in exchange for first type 680 at full price less \$2,500 for reconditioning.

5. Our first loan payment becomes due to Morgan Guaranty Trust Company on October 31 (including interest from July 31).

One additional month! Slippage!

adams associates

On October 31, 1965

1. System has functioned reasonably satisfactorily (no more than 100 hours of unscheduled downtime in total between July 2 and October 31), or we may elect to return the entire system for full refund, or to hold same for up to six months while we obtain replacement, and then return it, with forfeiture only of loan payments made from November 1, 1965, to date of return.

*Tos
vague*

No!

2. Type 166 and 162 meets specification of February 1964, or DEC lends us duplicates until they do.

*Will
meet by
2 July.
yes!*

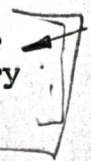
3. Type 237 drum meets specification, or DEC lends us duplicate of 237, 236 and 167 units until it does, or we pay one-half price for these components as is.

60%

4. DEC accepts payment for above items in the form of a note bearing 6% interest, payable one-third on October 31, 1966, one-third on October 31, 1967, and the balance on October 31, 1968.

No!

→ 5. DEC lends us type 338 with 8K core and Dataphone interface until March 1, 1966 with option to buy if we notify by January 3, 1966. *providing Draper orders.*



Possibilities

1. This thing in general.
2. Lease with some items not being paid for.
- 3.

Acceptance?

- On October 31, 1985
- #1. Why, in view of return or addition option on second page. Pay now, cry later.
 - #2 (check contract) Pg 7 has good starting point. Down time definition is good, but needs addition of "working days" as shown in book copy. Must have maint. contract
 - #3 They have to pay extra for extra service during warranty. Regular maint. contracts would apply after warranty. 1%/yr is appropriate for extra charge during warranty.
 - #4 We would have to start building these options now to meet possible deliveries.
 - #5 why? How will they handle in house TTY? Can 680 do this?

adams associates

Proposed Agreement with DEC

On July 2, 1965

1. Type 570 magnetic tape transports work reliably without excessive tape wear.
2. Type 237 drum with control, operating at half of rated density, is installed and works reliably.
3. DEC lends us the following equipment until October 31, 1965, at no charge.
 - (a) Central processor type 166 @ \$146,100 and fast memory type 162 @ \$30,000 (total \$176,100) and
 - (b) Drum system, including type 237 @ \$75,000, type 236 @ \$13,000 and type 167 @ \$22,000 (total \$110,000) operating at half of rated density
4. We buy remainder of system, approximately \$700,000 payable on July 31, 1965, under a purchase agreement including
 - (a) the excessive downtime warranty (if down more than five prime hours for more than one consecutive day, DEC meets our loan payment and maintenance payments for the days affected),
 - (b) the off-hours maintenance agreement (we pay 1% of purchasing price per year additional for maintenance after six months), and
 - (c) extra equipment options, augmented by options on delivery of type 680 data communications systems with 32 to 64 interfaces, on 60 days notice, one in each of the next calendar quarters commencing July 1, 1965, and on type 338 display system with 8K core and Data-phone interface on 60 days notice, one in each of two calendar quarters commencing January 1, 1965,
 - (d) DEC to credit our type 630 system in exchange for first type 680 at full price less \$2,500 for reconditioning.
5. Our first loan payment becomes due to Morgan Guaranty Trust Company on October 31 (including interest from July 31).

adams associates

On October 31, 1965

1. System has functioned reasonably satisfactorily (no more than 100 hours of unscheduled downtime in total between July 2 and October 31), or we may elect to return the entire system for full refund, or to hold same for up to six months while we obtain replacement, and then return it, with forfeiture only of loan payments made from November 1, 1965, to date of return.
2. Type 166 and 162 meets specification of February 1964, or DEC lends us duplicates until they do.
3. Type 237 drum meets specification, or DEC lends us duplicate of 237, 236 and 167 units until it does, or we pay one-half price for these components as is.
4. DEC accepts payment for above items in the form of a note bearing 6% interest, payable one-third on October 31, 1966, one-third on October 31, 1967, and the balance on October 31, 1968.
5. DEC lends us type 338 with 8K core and Dataphone interface until March 1, 1966 with option to buy if we notify by January 3, 1966.

The following refers to the items, by number, contained in the Adams Associates proposed agreement with DEC, delivered to DEC on 11 June 1965.

On July 2, 1965

Item 1: Acceptable

Item 2: Acceptable

Item 3: a. DEC does not feel that this is acceptable. It is our understanding that this is based on the feeling that the PDP-6 system operating speed does not meet specifications listed in F-65. These specifications were based on design information and were made at a time when specific measurements could not be obtained. F-65 clearly states that the timing flow chart will yield only approximate times. The new timing flow chart represents a firm specification based on actual measurements made on operating systems. While some instructions and the memory read access time are slower than originally estimated, other instructions and the memory cycle time are faster. The net result is a reduction of 10 per cent in the number of instructions performed per second when running a typical program. DEC feels that this is well within the meaning of the term "approximate".

At the present time, the Keydata installation is not running at the speeds specified by the new chart. The necessary modifications will be installed and the system will be up to specified speeds on or before 2 July.

b. Acceptable.

Item 4: Adams buys everything except drum system. Title to pass and invoice dated on or before 2 July. Our normal net 30 days terms would apply.

a. This is agreeable under the following conditions:

1. "Down time" and "working day" are defined as on page 7 of the existing lease contract.

2. For every period of 2 or more consecutive working days, during which the down time each day exceeds one-half of the working day, (i.e., more than 5 hours out of the 10 hours) DEC agrees to pay a penalty of \$200.00 for each day of down time.

3. This penalty clause shall apply only during the warranty period of the initial system and during periods when the entire system is covered by a DEC Maintenance Contract.

b. This is not agreeable to DEC as stated. One-shift maintenance service is included in the basic monthly rental price. The special maintenance service fee (equivalent to one per cent per year of the purchase price) covered the extension of this service as detailed in the existing lease contract. The PDP-6 warranty includes one-shift maintenance for the warranty period. The extended maintenance service can be provided during the warranty period for a fee of one-half of one per cent of the purchase price of the equipment. If Adams enters into a one-shift maintenance contract at the end of the warranty period, DEC will continue the extended service for an additional fee of one per cent per year of the purchase price of the equipment.

c. We would prefer to consider this separately and not as a part of the present negotiations.

d. This is not acceptable to DEC.

Item 5: Acceptable.

On October 1, 1965

Item 1. This is not agreeable to DEC. While we feel that the system will meet or exceed the reliability requirements indicated, we consider this too vague and unsatisfactory as a criteria for return of the entire system.

Item 2. Not acceptable. See comments concerning 3a on page 1.

Item 3. Agreeable, except that under these conditions the price will be adjusted to 60% of list price rather than 50%.

Item 4. This is not agreeable to DEC. We would consider a lease arrangement to cover the drum system.

Item 5. We would prefer to consider this as a separate item and not make it a part of the present negotiations.

Instruction	Instruction Duty Factor (%)	Original Estimates (Microseconds)	Present Specification (Microseconds)	Ratio (%)	Weighted Ratio (%)
Full & Half word moves	20	4.2	4.0	1.06	20.12
Full & Half word immediate	5	2.0	2.6	.77	3.85
LDB (7 Bits, 15 off set)	3	9.5	8.5	1.12	3.36
IDPB (7 Bits, 23 off set)	2	11.0	10.5	1.04	2.08
Block transfer	-	--	2 + 4n	--	--
Exchange	1	4.2	4.2	1.0	1.0
Fixed point add	4	4.1	4.4	.93	3.72
Fixed point subtract	2	4.3	4.6	.93	1.86
Fixed point multiply	1	15.9	20.0	.79	.79
Fixed point divide	1	24.3	28.0	.86	.87
Floating point add	5	7.2	9.3	.78	3.90
Floating point subtract	2	7.4	9.9	.75	1.50
Floating point multiply	2	13.7	20.0	.69	1.38
Floating point divide	1	19.7	27.0	.73	.73
Boolean	4	4.	4.1	.98	3.92
Shifting 1 word	3	2.4 + .15n	3.1 + .13n	.93	2.79
Shifting 2 words	1	3.4 + .15n	4.0 + .13n	.96	.96
AOSE	2	4.4	4.6	.96	1.98
AOJE	2	3.5	4.1	.85	1.70
Arithmetic compare (CAME)	2	4.6	4.9	.93	1.86
Logic compare (TLZE)	9	3.2	3.9	.82	7.38
Jumpint (JRST, JFCL)	12	2.9	2.9	.76	9.12
CONO	1	3.4	4.3	.77	.77
BLKI	4	7.7	8.1	.95	3.80
PUSHJ	11	4.7	4.65	1.01	11.11
				21.38 =	90.55%
				24 89%	

INSTRUCTION PERFORMANCE
1 - 163,162 MEMORIES

SECURITY AGREEMENT - CHATTEL MORTGAGE

Charles W. Adams Associates, Inc., Debtor, and Morgan Guaranty Trust Company of New York, Secured Party, with addresses as they appear with their signatures below, agree as follows:

I. Creation of Security Interest. Debtor hereby grants to Secured Party a security interest in the Collateral described in Paragraph II to secure the performance and payment of the obligations of Debtor to Secured Party under Paragraph III.

II. Collateral. The Collateral of this Security Agreement is equipment of the following description: One Digital Equipment Corp. PDP-6 computer and disc file with serial No. _____, as more particularly described in Exhibit "A" attached hereto, and all attachments, replacements, additions and accessions thereto, all of which shall remain personal property and shall be kept at the Debtor's place of business at 575 Technology Square, Cambridge, Massachusetts.

III. Debtors Obligations.

A. Obligation to Pay. Debtor shall pay to Secured Party the sums evidenced by the promissory note executed in connection with the advance made subsequent to and pursuant to this Security Agreement in accordance with the terms of the note.

(1) Collection Costs. Debtor shall pay to Secured Party reasonable costs of collection of money due and unpaid including reasonable attorneys' fees.

(2) Acceleration. Upon default, Debtor shall pay immediately to Secured Party, if Secured Party so elects, the entire amount remaining unpaid under this Security Agreement.

(3) Additional Obligations.

(1) Protection of Collateral. The Collateral

(a) will be used primarily in the Debtor's business unless Secured Party consents in writing to another use, and

(b) will not be misused or abused, wasted or allowed to deteriorate except for the ordinary wear and tear of its intended primary use, and

(c) will be insured, until this Security Agreement is terminated, against all expected risks to which it is exposed and those which Secured Party may designate, with the policies acceptable to Secured Party, and payable to both Secured Party and Debtor, as their interests appear, and with duplicate policies deposited with the Secured Party, and

(d) will be kept at 575 Technology Square, Cambridge, Massachusetts, where Secured Party may inspect it at any time unless Secured Party consents in writing in advance to its removal to another location.

2. Protection of Security Interest.

(a) The Collateral will not be sold, transferred, or disposed of or be subjected to any unpaid charge, including taxes, or to any subsequent interest of a third person created or suffered by Debtor voluntarily or involuntarily, unless the Secured Party consents in advance in writing to such charge, transfer, disposition or subsequent interest, except that the Collateral may be subject to the security interest of C.I.T. Corporation provided that security interest is subordinate to the security interest of Secured Party, and

(b) Debtor will sign and execute alone or with Secured Party any Financing Statement or other document or procure any document, and pay all connected costs, necessary to protect the security interest under this Security Agreement against the rights or interests of third persons, and

(c) Debtor will reimburse Secured Party for any action to remedy a default which Secured Party elects pursuant to the terms of Paragraph VI, and

(d) The proceeds advanced by Secured Party pursuant to this Security Agreement shall be used to buy or for Debtor to otherwise acquire rights in the Collateral described in Paragraph II, and

(e) Debtor shall not so attach or affix the Collateral described in Paragraph II to real estate described in such paragraph in such a manner that it shall become a fixture thereto unless Secured Party gives its prior consent in writing to such attachment.

3. Financial Reports. Until all obligations of Debtor to Secured Party under this Security Agreement and under any promissory note of Debtor secured hereby have been fully performed and paid, Debtor shall:

(a) Within a reasonable time after the close of each quarter annual period of its fiscal year, furnish Secured Party with a balance sheet as of the end of such period, together with a Profit and Loss Statement for the period and such other information as Secured Party may reasonably require. Such statements may be certified by an authorized accounting officer of Debtor unless they were prepared by an independent certified public accountant, in which event, they shall be certified by such party:

(b) Within a reasonable time after the end of each fiscal year, Debtor shall furnish Secured Party with its balance sheet as of the end of such fiscal year, with a Statement of Profit and Loss and reconciliation of surplus for such fiscal year, all certified by an independent certified public accountant selected by Debtor and satisfactory to Secured Party.

IV. Secured Party's Obligations. Secured Party shall advance Four Hundred Ninety Five Thousand Dollars (\$495,000.00) on or before June 30, 1965, for the purpose of enabling the Debtor to pay the Digital Equipment Corp. for the Collateral.

V. Default. Misrepresentation or misstatement in connection with, non-compliance with or nonperformance of any of Debtor's Obligations or Agreements under Paragraphs III and VIII shall constitute default under this Security Agreement. In addition, Debtor shall be in default if bankruptcy or insolvency proceedings are instituted by or against the Debtor or if Debtor makes any assignment for the benefit

of creditors, or if Debtor defaults under its Security Agreement entered into contemporaneously herewith with the C.I.T. Corporation with regard to the identical collateral.

VI. Secured Party's Rights and Remedies.

A. Secured Party may assign this Security Agreement and the Assignee shall be entitled, upon notifying the Debtor, to performance of all Debtor's Obligations and Agreements under Paragraphs III and VIII and the Assignee shall be entitled to all of the rights and remedies of Secured Party under this Paragraph VI.

B. Upon Debtor's Default Secured Party may exercise its rights of enforcement under the Uniform Commercial Code in force in Massachusetts at the date of this Security Agreement and, in conjunction with, addition to, or substitution for, those rights, at Secured Party's discretion, may

1. enter upon Debtor's premises to take possession of, assemble and collect the Collateral or to render it unusable, and

2. require Debtor to assemble the Collateral and make it available at a place Secured Party designates which is mutually convenient, to allow Secured Party to take possession or dispose of the Collateral, and

3. waive or remedy any default in any reasonable manner without waiving the default remedied and without waiving any other prior or subsequent default, and

4. give any notice or notification to the Debtor required by the Uniform Commercial Code by mailing such notice, postage prepaid, at least five days before the event, if any, which is the subject of the notice, to Debtor's address as it appears at the end of this Security Agreement, and

5. incur reasonable attorneys' fees and legal expenses in exercising any of its rights and remedies upon Debtor's default which shall become

part of its reasonable expenses of retaking, holding, preparing the Collateral for sale and the like.

C. Secured Party may act as attorney for the Debtor in obtaining, adjusting, settling and canceling any insurance covering the Collateral and in endorsing any draft.

VII. Rights and Remedies of Debtor. Debtor shall have all of the rights and remedies before or after default provided in Article 9 of the Uniform Commercial Code in force in Massachusetts at the date of this Security Agreement.

VIII. Additional Agreements and Affirmations.

A. Debtor Agrees and Affirms

1. that information supplied and statements made by it in any financial or credit statement or application for credit prior to this Security Agreement are true and correct, and

2. that no Financing Statement covering the Collateral or its proceeds is on file in any public office and that, except for the security interest granted in this Security Agreement, there is no adverse lien, security interest or encumbrance in or on the Collateral, other than that of the C.I.T. Corporation, and

3. that the address of Debtor's place of business is as appears below his signature.

B. Mutual Agreements.

1. "Debtor" and "Secured Party" as used in this Security Agreement include the successors or assigns of those parties.

2. The law governing this Secured Transaction shall be that of the Commonwealth of Massachusetts in force at the date of this Security Agreement.

EXECUTED this day of

196 .

MORGAN GUARANTY TRUST COMPANY OF
NEW YORK

CHARLES W. ADAMS ASSOCIATES, INC.

By _____

By _____

23 Wall Street, New York, N. Y.

Morgan Guaranty Trust Company of New York
23 Wall Street
New York, New York 10015

Dear Sirs:

Re: Guarantee of Certain Obligations of
Charles W. Adams Associates, Inc.

This guarantee is given to you by Digital Equipment Corporation ("DEC") as an inducement for and in consideration of your entering into a "Security Agreement - Chattel Mortgage" of even date herewith (the "Security Agreement") with Charles W. Adams Associates, Inc. ("Debtor"), the form of which you have delivered to DEC. DEC has agreed to sell to Debtor certain equipment and Debtor intends to pay over to DEC the entire proceeds of the notes issued pursuant to the Security Agreement in partial payment of the purchase price of the equipment.

In accordance with the terms and conditions set forth in this letter, DEC hereby guarantees the payment of all amounts of principal and interest which become due and payable to you from time to time from the Debtor by the terms of any and all notes issued by the Debtor pursuant to and in accordance with the Security Agreement.

This guarantee is subject to the following terms and conditions:

1. It is agreed that, anything in the Security Agreement or note(s) to the contrary notwithstanding, you will not accelerate the payment of the indebtedness because the Debtor has failed to pay a monthly installment provided it is paid by DEC within days of its due date.
2. To the extent that you call upon DEC to honor this guarantee and DEC does honor it, you will transfer, without recourse, to DEC any and all notes (or portion thereof) held by you relating to the principal amounts paid you by DEC.
3. You will advise DEC with respect to the fact and amount of all loans made by you pursuant to the Security Agreement.
4. You will deliver to DEC an executed copy and five conformed copies of the Security Agreement and you will deliver to DEC a conformed copy of each

note executed by Debtor pursuant to the Security Agreement.

5. You will not make any change or affect any amendment to the Security Agreement without the written consent of DEC.

6. You will not make any adjustment or compromise with respect to the Security Agreement or any of the notes issued pursuant thereto without the written consent of DEC.

7. You will notify DEC of any default or event of default under the Security Agreement or notes of which you have any knowledge.

Your obligation to communicate with DEC is satisfied by mailing the item first-class mail, postage prepaid, to Digital Equipment Corporation, Attention Mr. Harlan Anderson, Treasurer, 146 Main Street, Maynard, Massachusetts.

None of the terms or provisions of this guarantee may be waived, altered, modified or amended except in writing and then only to the extent therein expressly set forth.

This guarantee shall be binding upon DEC, its successors and assigns and shall inure to the benefit of and be enforceable by you, your successors and assigns and it shall be governed by and construed in accordance with the laws of the State of New York.

Very truly yours,

DIGITAL EQUIPMENT CORPORATION

By _____
Vice President

AGREED AND ACCEPTED

MORGAN GUARANTY TRUST COMPANY
OF NEW YORK

By _____

Morgan Guaranty Trust Company of New York
23 Wall Street
New York, New York 10015

Re: Charles W. Adams Associates, Inc.
Cambridge, Massachusetts

Gentlemen:

Conformed copies of our respective Security Agreements with the above firm as Debtor together with conformed copies of our respective promissory notes of Debtor secured thereby all dated 1965, and relating to a Digital Equipment Corporation PDP-6 Computer Serial # , are attached hereto.

With regard thereto and our respective rights thereunder, it is mutually agreed as follows:

1. Your security interest under your Security Agreement in the Collateral described therein shall have priority over and be senior to our security interest under our Security Agreement in said Collateral or the proceeds thereof.
2. In the event you find it desirable or expedient, at any time, to make a substantial change in the amounts of or the times of payment of instalments owing you by Debtor under its promissory note, you shall give us notice of such fact together with a copy of the amended repayment schedule but no instalment of principal or interest owing you by Debtor shall be scheduled for repayment later than May 30, 1967 without our prior written consent.
3. You further agree to advise us promptly of any default by Debtor in the performance of its obligations to you under its note or Security Agreement, which are known to you and have continued uncorrected for a period of more than 3 days, as well as of any payments made to you on account of Debtor by Digital Equipment Corporation pursuant to its guarantee that you hold.

If the foregoing properly sets forth our agreement, please so indicate in the space provided below, returning an executed copy of this letter for our file.

Very truly yours,

C.I.T. CORPORATION

By _____

Agreed to this day
of 1965.

MORGAN GUARANTY TRUST COMPANY
OF NEW YORK

By _____

\$495,000

New York, New York,

1965.

The undersigned promises to pay to the order of Morgan Guaranty Trust Company of New York at its principal office at 23 Wall Street, New York 15, New York, Four Hundred Ninety-Five Thousand Dollars (\$495,000) in the following manner: Twenty (20) monthly principal repayments of Twenty-Four Thousand Dollars (\$24,000) each, followed by a final monthly payment of Fifteen Thousand Dollars (\$15,000) with interest on the unpaid balance, at the rate of $5\frac{1}{2}\%$ per annum, payable with each installment of principal. The first monthly payment called for by this note shall be due on the day of 1965, and the subsequent installments shall be due on the same day of each of the next twenty (20) months.

This note is executed pursuant to a Security Agreement between the payee and the maker dated , 1965, and is secured by the Collateral provided therein.

The Debtor will acquire rights in such Collateral with the proceeds of this note.

The Security Agreement specifies certain events of default and upon the occurrence of any one or more of them this note may be declared to be immediately due and payable as provided in the Security Agreement.

If any installment of this note becomes due or payable on a Saturday, Sunday or public holiday under the laws of the State of New York, maturity shall be extended to the next succeeding business day and interest thereon shall be payable at the above rate during such extension.

This note shall be governed by and construed in accordance with the laws of the State of New York.

CHARLES W. ADAMS ASSOCIATES, INC.

By _____

Disagreement.

1. 18 or 24 hour day & 5 or 7 day weeks.
2. 1/2 hour vs 1 hour
3. \$2,000 vs \$3,000
4. 1st Interruption is free.
5. Liquidated Damages of 30,000, 45,000 or 100,000
9, 6, 3 - 18 hours.
6. Allowable Down Time for Rental & Penalty 8, 6, 4 - 24 hours
7. 24 hour maintenance cover. ←
8. Acceptance Test Period Definition.

ARD

→ Be careful of hours, time
Be as specific as possible.

Let A.R.D. know needs a week of the status!

digital

EQUIPMENT
CORPORATION
MAYNARD, MASSACHUSETTS

Adams and CIT Material

No!



INTEROFFICE MEMORANDUM

SUBJECT CIT Proposals
TO Harlan Anderson

DATE June 16, 1965
FROM R. Testa

John Aldrich of Lybrands tells me that they would treat both CIT proposals as loans for financial reporting purposes.

RJT/jh

GASTON, SNOW, MOTLEY & HOLT

WARREN MOTLEY
F. T. HAMMOND, JR.
ROY M. ROBINSON
JOSEPH P. ROONEY
FRANCIS R. HINES
ARTHUR P. SCHMIDT
PAUL V. POWER
ANDREW M. WOOD
F. D. HERBERICH
N. U. SOMMERFELD
GORDON K. BELL

ROBERT H. HOLT
EARLE W. CARR
ROBERT H. HOPKINS
CHARLES JACKSON, JR.
GARDNER CUSHMAN
RICHARD N. BAIL
CALEB LORING, JR.
JOHN B. PIERCE, JR.
HARRY F. RICE, JR.
JAMES M. STOREY
ROGER M. THOMAS

JOHN W. BELASH

ANSEL B. CHAPLIN
ERNEST V. KLEIN
ROBERT S. PIRIE
RICHARD M. REILLY

STEPHEN A. MOORE
RICHARD J. TESTA
WILLIAM F. KEHOE
DAVID M. ELWOOD

SHAWMUT BANK BUILDING
82 DEVONSHIRE STREET
BOSTON, MASSACHUSETTS 02109

AREA CODE 617 CAPITOL 7-3180
CABLE ADDRESS: GASTOW

June 15, 1965

Mr. D. E. Kidd, Vice President
C. I. T. Corporation
Park Square Building
250 Stuart Street
Boston, Massachusetts 02116

Dear Don:

I have now had an opportunity to look at the proposed DEC-CIT repurchase agreement more carefully. Naturally I would prefer to have this agreement reflect our understanding more explicitly. To this end, I have recast page two of the draft and enclose a copy herewith for your comments.

Since DEC is bearing the risk of default, it is essential that DEC control any resale of the equipment on default.

In this draft I have deleted CIT's power to rewrite the payment schedule. This power could lead to a guarantee lasting longer than 36 months--something the DEC directors have categorically refused to do. If Adams wants to rewrite its agreement with CIT, DEC would like to have a voice.

I will not be in my office Wednesday. I will give you a call Thursday.

Very truly yours,

Richard J. Testa

RJT:mag
Enclosure

cc: Mr. Harlan E. Anderson ✓

the amount owing you at the time of such purchase. Until such payment, you may, but are not obligated to, continue liquidating the account and we will remain liable for any deficiency, including reasonable expenses established in the liquidation thereof. You may sell any repossessed equipment only with our prior written consent and upon terms satisfactory to us.

We waive presentment, demand, notice and protest, and consent that you may grant extensions of time and otherwise handle the making of collections in accordance with your business judgment without affecting our liability hereunder.

This Agreement shall terminate and expire when and if Adams shall have duly paid to you the first 36 installments to be paid under its note held by you, such 36 installments consisting of 22 payments of interest and 14 payments of principal and interest; otherwise this agreement shall continue in full force and effect.

This instrument shall become a firm agreement between us upon your acceptance of the same in the space provided below.

Very truly yours,

DIGITAL EQUIPMENT CORPORATION

Accepted: _____, 1965

C.I.T. CORPORATION

By _____
Vice President

By _____

MEMORANDUM

TO: H. Anderson
FROM: R. Testa
RE: Alternative Proposal by CIT on Sale of Adams PDP-6

Today Don Kidd called me with an alternative CIT proposal. CIT would purchase the Adams equipment from DEC subject to the present lease. Adams would then remit its monthly rental charges to CIT. DEC would continue to maintain the machine and would bill CIT for maintenance. If at any time Adams defaulted on the lease or terminated the lease, then DEC would be obligated to find a new lessee for CIT or failing that to repurchase the equipment from CIT at its then remaining investment. The repurchase price would be computed at such a fashion so as to give CIT a 9% return on its investment.

Under this proposal there is virtually no opportunity for anyone to obtain the investment credit.

I have discussed this proposal with John Aldrich of Lybrand, Ross Bros. who has not yet offered any comments.

M E M O R A N D U M

TO: H. Anderson
 FROM: R. Testa
 RE: Proposal by CIT on sale and lease back of Adams PDP-6

I talked to Don Kidd of CIT today concerning the possible terms under which CIT would enter into a sale and lease back to DEC. (Kidd was very cool toward the possibility of a sale to CIT and a lease from CIT to Adams.)

The proposal is that CIT purchase the equipment for (using illustrative figures) \$990,000. DEC would then lease the equipment for six years with the following monthly rental charges:

<u>YEAR</u>	<u>AMOUNT</u>
1	\$28,750
2	23,950
3	19,150
4	14,350
5	9,575
6	3,975

At the end of the lease CIT offers three alternatives:

- A. CIT keeps the machine;
- B. CIT gives DEC an option to purchase the machine at fair market value;
- C. DEC obtains an option to purchase the machine at a price equal to 3% of the original cost.

In order to allow DEC to meet its obligations to Adams, CIT is willing to give DEC an option to repurchase the machine at any time on a formula repurchase basis. The formula would in effect provide for no penalty if the repurchase occurred during the first year, but a small penalty if it occurred in year two. There would probably be no penalty for years three through six inclusive. If this were a straight sale and lease back with no option for repurchase, the transaction would probably be recognized as a sale for accounting purposes. The existence of the option to repurchase at any time does present an additional difficulty.

I have discussed this entire proposal with John Aldrich of Lybrand, Ross Bros., and he is planning to report back later this week.

Kidd of CIT reports that Wednesday, June 23 is probably the last date on which the sale-lease back route can be conveniently chosen although I feel certain that if necessary it can be pushed all the way up to the morning of June 25.

ADDENDUM

Kidd tells me that the monthly rental charges are computed with a 9% interest factor.

R J Tester

C. I. T. CORPORATION

Industrial Financing

PARK SQUARE BUILDING, BOSTON, MASSACHUSETTS 02116

HUbbard 2-6100

D. E. KIDD
VICE PRESIDENT

June 14, 1965

Mr. Richard Testa
Gaston, Snow, Motley & Holt
82 Devonshire Street
Boston, Massachusetts

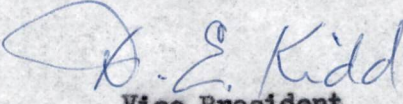
Dear Dick:

The Repurchase Agreement enclosed is the same one that I showed you last week. We have tried a couple of variations on the language relating to termination of the guaranty to try and make the intent more clear - and each time we wind up with rather involved language because of the inter-relation between C.I.T.'s deal and the Morgan Guaranty transaction.

It is understood that the intent of the paragraph is that Digital Equipment shall be relieved of its guaranty when and if the first 36 instalments to be paid on the total transaction have been paid promptly. As far as we are concerned, this would mean 22 payments of interest and 14 payments of principal and interest. If you have some revision of the language which you think more clearly expresses this intent, we would be happy to consider it.

Very truly yours,

C.I.T. CORPORATION


Vice President

DEK:mc
Enc.

CC: Mr. Harlan Anderson ✓
Digital Equipment Corporation
Maynard, Massachusetts
Mr. Peter Milton, Jr.
Morgan Guaranty Trust Company
23 Wall Street
New York, New York

DRAFT
GHS:pw
5/27/65

_____, 1965

C.I.T. Corporation
Park Square Building
Boston, Massachusetts

RE: Charles W. Adams Associates, Inc.

Gentlemen:

We have agreed to sell one of our PDP-6 Digital Computers and related equipment to Charles W. Adams Associates, Inc. ("Adams") for the sum of \$990,000. As an inducement for and in consideration of your loaning Adams \$495,000 on its promissory note secured by a security interest in said equipment under a Security Agreement, copies of which note and Agreement are attached, with the entire proceeds of such loan paid to us for application on the purchase price, we do hereby make the following agreement with you.

In the event there shall have been a default in any payment by Adams to you under its said note or Security Agreement continuing uncured by Adams for 61 days or more, or if the equipment covered by your Security Agreement shall have been surrendered or abandoned by or repossessed from Adams, or if there shall have been a breach of any warranty made by us to Adams whereby Adams may rescind its purchase of said Computer and the related equipment, we shall purchase from you, upon request, your note of Adams and your rights under your Security Agreement securing the same. We shall have 30 days after your request to purchase to pay you the purchase price which shall be the unpaid balance owing you by Adams, including accrued interest plus any expenses of collection, repossession, transportation and storage incurred by you. Upon the payment of such purchase price, the note shall be endorsed and the Security Agreement shall be assigned by you to us without recourse on you and without any warranties, express or implied, other than as to

the amount owing you at the time of such purchase. Until such payment, you may, but are not obligated to, continue liquidating the account and we will remain liable for any deficiency, including reasonable expenses established in the liquidation thereof. You may sell any repossessed equipment for cash or on credit and only the net cash collected shall be considered in computing the deficiency chargeable against us.

We waive presentment, demand, notice and protest, and consent that you may grant extensions of time, rewrite the schedule of payments owing by Adams and otherwise handle the making of collections in accordance with your business judgment without affecting our liability hereunder.

This Agreement shall terminate and expire upon Adams having paid to you the first 36 instalments of interest and principal under its note held by you, either in accordance with the schedule of payments set forth in said note, or under any revised schedule of payments you may have entered into with Adams provided that Adams' financial condition at such time is substantially no worse than its financial condition as of the date of this agreement, otherwise this agreement shall continue in full force and effect.

This instrument shall become a firm agreement between us upon your acceptance of the same in the space provided below.

Very truly yours,

DIGITAL EQUIPMENT CORPORATION

By _____

Accepted: _____, 1965

C.I.T. CORPORATION

By _____
Vice President

C.I.T. CORPORATION

Industrial Financing

PARK SQUARE BUILDING, BOSTON, MASS. 02116

HUBBARD 2-6100

D. E. KIDD
VICE PRESIDENT

June 9, 1965

Mr. Harlan Anderson, Treasurer
Digital Equipment Corporation
Maynard, Massachusetts

Dear Mr. Anderson:

I am enclosing drafts of the following instruments in connection with our participation in the financing of the proposed sale of your PDP-6 Computer to C. W. Adams Associates, Inc.:

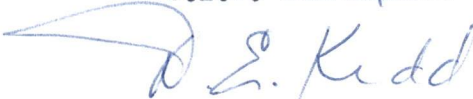
1. Security Agreement-Chatteel Mortgage
2. Note for \$495,000.
3. Repurchase Agreement running from Digital Equipment Corporation to C.I.T. Corporation

The Security Agreement and the Note are, I believe, in almost exactly the same form as the similar instruments you have probably already received relating to the Morgan Guaranty Trust Company of New York participation in this financing. The Repurchase Agreement fits our operation a little better than the Guaranty being used by Morgan Guaranty Trust.

I would appreciate hearing from you as soon as you have had a chance to review these instruments - particularly if there are any changes you would like us to consider. As soon as we hear from you we can put them in final form and have them processed so that they will be ready for closing as soon as C. W. Adams Associates, Inc. indicates that they are ready to go ahead with the purchase.

Very truly yours,

C.I.T. CORPORATION



Vice President

DEK:mc
Enc.

SECURITY AGREEMENT - CHATTEL MORTGAGE

Charles W. Adams Associates, Inc., Debtor, and C.I.T. Corporation, Secured Party, with addresses as they appear with their signatures below, agree as follows:

I. Creation of Security Interest. Debtor hereby grants to Secured Party a security interest in the Collateral described in Paragraph II to secure the performance^{and payment}/of the obligations of Debtor to Secured Party under Paragraph III.

II. Collateral. The Collateral of this Security Agreement is equipment of the following description: One Digital Equipment Corp. PDP-6 computer and disc file with Serial No. _____, as more particularly described in Exhibit "A" attached hereto, and all attachments, replacements, additions and accessions thereto, all of which shall remain personal property and shall be kept at the Debtor's place of business at 575 Technology Square, Cambridge, Massachusetts.

III. Debtor's Obligations.

A. Obligation to Pay. Debtor shall pay to Secured Party the sums evidenced by the promissory note executed in connection with the advance made subsequent to and pursuant to this Security Agreement in accordance with the terms of the note.

(1) Collection Costs. Debtor shall pay to Secured Party reasonable costs of collection of money due and unpaid including reasonable attorneys' fees.

(2) Acceleration. Upon default, Debtor shall pay immediately to Secured Party, if Secured Party so elects, the entire amount remaining unpaid under this Security Agreement.

B. Additional Obligations.

(1) Protection of Collateral. The Collateral

(a) will be used primarily in the Debtor's business unless Secured Party consents in writing to another use, and

(b) will not be misused or abused, wasted or allowed to deteriorate except for the ordinary wear and tear of its intended primary use, and

(c) will be insured, until this Security Agreement is terminated, against all expected risks to which it is exposed and those which Secured Party may designate, with the policies acceptable to Secured Party, and payable to both Secured Party and Debtor, as their interests appear, and with duplicate policies deposited with the Secured Party, and

(d) will be kept at 575 Technology Square, Cambridge, Massachusetts, where Secured Party may inspect it at any time unless Secured Party consents in writing in advance to its removal to another location.

(2) Protection of Security Interest.

(a) The Collateral will not be sold, transferred, or disposed of or be subjected to any unpaid charge, including taxes, or to any subsequent interest of a third person created or suffered by Debtor voluntarily or involuntarily, unless the Secured Party consents in advance in writing to such charge, transfer, disposition or subsequent interest, except that the Collateral may be subject to the prior security interest of Morgan Guaranty Trust Company of New York under a Security Agreement entered into by Debtor with that firm contemporaneously herewith with respect to the identical Collateral, and

(b) Debtor will sign and execute alone or with Secured Party any Financing Statement or other document or procure any document, and pay all connected costs, necessary to protect the security interest under this Security Agreement against the rights or interests of third persons, and

(c) Debtor will reimburse Secured Party for any action to remedy a default which Secured Party elects pursuant to the terms of Paragraph VI, and

(d) The proceeds advanced by Secured Party pursuant to this Security Agreement shall be used to buy or for Debtor to otherwise acquire rights in the Collateral described in Paragraph II, and

(e) Debtor shall not so attach or affix the Collateral described in Paragraph II to the real estate described in such Paragraph in such a manner that it shall become a fixture thereto unless Secured Party gives its prior consent in writing to such attachment.

(3) Financial Reports. Until all obligations of Debtor to Secured Party under this Security Agreement and under any promissory note of Debtor secured hereby have been fully performed and paid, Debtor shall:

(a) Within a reasonable time after the close of each quarter annual period of its fiscal year, furnish Secured Party with a balance sheet as of the end of such period, together with a Profit and Loss Statement for the period and such other information as Secured Party may reasonably require. Such statements may be certified by an authorized accounting officer of Debtor unless they were prepared by an independent certified public accountant, in which event, they shall be certified by such party;

(b) Within a reasonable time after the end of each fiscal year, Debtor shall furnish Secured Party with its balance sheet as of the end of such fiscal year, with a Statement of Profit and Loss and reconciliation of surplus for such fiscal year, all certified by an independent certified public accountant selected by Debtor and satisfactory to Secured Party.

IV. Secured Party's Obligations. Secured Party shall advance Four Hundred Ninety Five Thousand Dollars (\$495,000.00) on or before June 30, 1965, for the purpose of enabling the Debtor to pay the Digital Equipment Corp. for the Collateral.

V. Default. Misrepresentation or misstatement in connection with, noncompliance with or nonperformance of any of Debtor's Obligations or Agreements under Paragraphs III and VIII shall constitute default under this Security Agreement. In addition, Debtor shall be in default if bankruptcy or insolvency proceedings are instituted by or against the Debtor or if Debtor makes any assignment for the benefit of creditors, or if Debtor defaults under its Security Agreement entered into contemporaneously herewith with Morgan Guaranty Trust Company of New York with regard to the identical collateral.

VI. Secured Party's Rights and Remedies.

A. Secured Party may assign this Security Agreement and the Assignee shall be entitled, upon notifying the Debtor, to performance of all Debtor's Obligations and Agreements under Paragraphs III and VIII and the Assignee shall be entitled to all of the rights and remedies of Secured Party under this Paragraph VI.

B. Upon Debtor's Default, Secured Party may exercise its rights of enforcement under the Uniform Commercial Code in force in Massachusetts at the date of this Security Agreement, and in conjunction with, addition to, or substitution for, those rights, at Secured Party's

discretion, may

(1) enter upon Debtor's premises to take possession of, assemble and collect the Collateral or to render it unuseable, and

(2) require Debtor to assemble the Collateral and make it available at a place Secured Party designates which is mutually convenient, to allow Secured Party to take possession or dispose of the Collateral, and

(3) waive or remedy any default in any reasonable manner without waiving the default remedied and without waiving any other prior or subsequent default, and

(4) give any notice or notification to the Debtor required by the Uniform Commercial Code by mailing such notice, postage prepaid, at least five days before the event, if any, which is the subject of the notice, to Debtor's address as it appears at the end of this Security Agreement, and

(5) incur reasonable attorneys' fees and legal expenses in exercising any of its rights and remedies upon Debtor's default which shall become part of its reasonable expenses of retaking, holding, preparing the Collateral for sale and the like.

C. Secured Party may act as Attorney for the Debtor in obtaining, adjusting, settling and canceling any insurance covering the Collateral and in endorsing any draft.

VII. Rights and Remedies of Debtor. Debtor shall have all of the rights and remedies before or after default provided in Article 9 of the Uniform Commercial Code in force in Massachusetts at the date of this Security Agreement.

VIII. Additional Agreements and Affirmations.

A. Debtor Agrees and Affirms

(1) that information supplied and statements made by it in any financial or credit statement or application for credit prior to

this Security Agreement are true and correct, and

(2) that no Financing Statement covering the Collateral or its proceeds is on file in any public office and that, except for the security interest granted in this Security Agreement, there is no adverse lien, security interest or encumbrance in or on the Collateral, other than that of Morgan Guaranty Trust Company of New York, and

(3) that the address of Debtor's place of business is as appears below his signature.

B. Mutual Agreements.

(1) "Debtor" and "Secured Party" as used in this Security Agreement include the successors or assigns of those parties.

(2) The law governing this Secured Transaction shall be that of the ~~STATE~~ ^{Commonwealth} of Massachusetts in force at the date of this Security Agreement.

EXECUTED this day of 1965.

CHARLES W. ADAMS ASSOCIATES, INC.

C.I.T. CORPORATION

By _____

By _____
Vice President

Address of Chief Place of Business

Park Square Bldg. , Boston, Mass.
02116

\$495,000.00

Cambridge, Mass., _____, 1965

The undersigned promises to pay to the order of C.I.T. Corporation, Four Hundred Ninety-Five Thousand Dollars (\$495,000.00) in successive monthly payments of one payment of \$9,000.00, followed by one payment of \$24,000.00, followed by twelve payments of \$16,000.00 each, followed by twelve payments of \$12,000.00 each, followed by twelve payments of \$8,000.00 each, followed by twelve payments of \$2,500.00 each, with interest at the rate of 9% per annum on the unpaid balance. Interest shall be paid monthly with the first payment due July 30, 1965. The first monthly payment of principal specified above shall be due May 30, 1967 with the following payments of principal due on the same day of the next succeeding forty-nine months.

This note is executed pursuant to a Security Agreement between the payee, as Secured Party, and the maker, as Debtor, dated _____, 1965, and is secured by the Collateral provided therein.

The Debtor will acquire rights in such Collateral with the proceeds of this note.

The Security Agreement specifies certain events of default and upon the occurrence of any one or more of them this note may be declared to be immediately due and payable as provided in the Security Agreement.

On and after June 30, 1967, Debtor may, at its option, prepay in full its indebtedness to Secured Party by the payment of the then unpaid principal balance of this note and unpaid interest accrued to the date of prepayment together with any other amounts owing by Debtor to Secured Party under said Security Agreement plus a premium of \$10,000.00 if prepayment occurs between June 30, 1967 and July

29, 1967 or plus a premium of \$7,500.00 if prepayment occurs between July 30, 1967 and June 30, 1968 after which date prepayment may be made without the payment of any premium, provided, however, that the payment of any premium that might otherwise be required, shall be waived in the event prepayment is the result of a refinancing or an additional financing transaction in which Secured Party is a substantial participant as a lender.

This note shall be governed by and construed in accordance with the laws of the State of Massachusetts.

CHARLES W. ADAMS ASSOCIATES, INC.

By _____

H.E.C.
6/11/65

adams associates

Proposed Agreement with DEC

On July 2, 1965

- 1. Type 570 magnetic tape transports work reliably without excessive tape wear. OK
- 2. Type 237 drum with control, operating at half of rated density, is installed and works reliably. OK
- 3. DEC lends us the following equipment until October 31, 1965, at no charge.

No! →
Central Processor will be speeded up to meet new flow diagram.

- (a) Central processor type 166 @ \$146,100 and fast memory type 162 @ \$30,000 (total \$176,100) and — 90% of spec.
- (b) Drum system, including type 237 @ \$75,000, type 236 @ \$13,000 and type 167 @ \$22,000 (total \$110,000) operating at half of rated density — yes.

Title goes on 2 July 2 and money on July 31.

150-200

4. We buy remainder of system, approximately \$700,000 payable on July 31, 1965, under a purchase agreement including

- (a) the excessive downtime warranty (if down more than five prime hours for more than one consecutive day, DEC meets our loan payment and maintenance payments for the days affected), Termination date!
Maintenance Contract!
- (b) the off-hours maintenance agreement (we pay 1% of purchasing price per year additional for maintenance after six months), and
- (c) extra equipment options, augmented by options on delivery of type 680 data communications systems with 32 to 64 interfaces, on 60 days notice, one in each of the next calendar quarters commencing July 1, 1965, and on type 338 display system with 8K core and Data-phone interface on 60 days notice, one in each of two calendar quarters commencing January 1, 1965, 1966.

note

No!

(d) DEC to credit our type 630 system in exchange for first type 680 at full price less \$2,500 for reconditioning.

5. Our first loan payment becomes due to Morgan Guaranty Trust Company on October 31 (including interest from July 31).

One additional month! Shippage!

adams associates

On October 31, 1965

1. System has functioned reasonably satisfactorily (no more than 100 hours of unscheduled downtime in total between July 2 and October 31), or we may elect to return the entire system for full refund, or to hold same for up to six months while we obtain replacement, and then return it, with forfeiture only of loan payments made from November 1, 1965, to date of return.

*Tos
vague*

2. Type 166 and 162 meets specification of February 1964, or DEC lends us duplicates until they do.

3. Type 237 drum meets specification, or DEC lends us duplicate of 237, 236 and 167 units until it does, or we pay one-half price for these components as is.

60%

4. DEC accepts payment for above items in the form of a note bearing 6% interest, payable one-third on October 31, 1966, one-third on October 31, 1967, and the balance on October 31, 1968.

→ 5. DEC lends us type 338 with 8K core and Dataphone interface until March 1, 1966 with option to buy if we notify by January 3, 1966. *providing Draper orders*

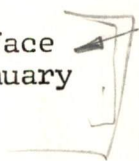
Possibilities

1. This thing in general.
2. Lease with some items not being paid for.
- 3.

No!

Will meet by 2 July. yes!

No!



LRL

11 AM

Wed. or Thurs.

Harrison Faulkner

- AMP, INC.

Dir. of Research

or

" of Adv. Suel.

Harrisburg

717-564-0101

x 8234

ADAMS

PDP-6

PDP-6 W/Teletype and PTR	\$ 3,500
163C Memory	2,600
163C Memory	2,600
162 Memory	600
136 Data Control	200
461 Card Reader and Control (200 CPM)	800
516-521 Magnetic Tape Control	400
570 Magnetic Tape Transport	1,800
555 DEctape Transport	530
551 DEctape Control	350
646 Line Printer & Control	1,200
270 Disc Field and Control	5,600
237 Drum	2,550
Memory Cycle Counter	100
163C Memory	2,600
136 Data Control	200
570 Transport	1,800
167 I/O Processor	700
630 DATA System	<u>400</u>

\$28,530 per year



INTEROFFICE MEMORANDUM

COMPANY CONFIDENTIAL

DATE April 9, 1965

SUBJECT Six Months Adams Prepayment

TO Harlan Anderson FROM Dick Mills

If Adams Associates wants to give us a six months prepayment there would be a zero effect on the profit and loss statement for the fiscal year 1965. Prepaid rentals are not allowed to be taken into income, but the federal taxes are netted out to their prepaid account into the accrued account on the balance sheet, since Uncle Sam wants to make sure that he is provided for at the time of receipt, regardless of whether or not you show it in the profit and loss statement.

Adams Associates has a fiscal year closing July 31, 1965, and it would simplify matters a great deal if they were to pay us the money July 1, thereby avoiding a footnote to the balance sheet that prepayment had been made, but for a few days giving us the cash advantage.

A short while ago, the Adams people were discussing with me the possibility of their buying out the equipment in September, 1965. At the time, I looked into the legal and financial ramifications for our fiscal year 1965, of starting them out on a rental basis and receiving notice here by the 15th of June that they intended to purchase. The net result of this was that we can reverse any rental payments made and put them on a full purchase basis if they give us notice by June 15, 1965. It looks, at this time, as if our net profit for the year 1965 will be below that of 1964, a position which we certainly do not want, so that if Adams purchases, this gross profit will push us over the 1964 net profit by a safe margin.

RFM/jh



INTEROFFICE MEMORANDUM

COMPANY CONFIDENTIAL

DATE April 13, 1965

SUBJECT Adams PDP-6

TO DEC Board of Directors

FROM Harlan E. Anderson

At the present time, a rental contract exists between DEC and Charles Adams Associates, Inc. for a PDP-6 computer. In November 1964, there was a detailed investigation of the possibility of this PDP-6 being sold to Adams with a guarantee of a bank loan to Adams by DEC. No action was taken.

This subject is being reopened at this time in the interest of aiding DEC cash flow and profits for the year ending 25 June 1965 and in the interest of aiding Adams cash flow and providing minimum total cost to Adams.

Original Loan

Source of Funds:	50% Morgan Guaranty Trust Company 50% CIT Financial Corporation
Duration of Loan:	30 months.
Duration of DEC Guarantee:	30 months.
Payment Plan:	No Down Payment.

Morgan

	12 months @	\$11,666.67
next	12 months @	23,333.20
next	month @	46,666.68
next	month @	23,333.20

Morgan interest was 5½% of the unpaid balance and is not included.

CIT

next	4 months @	\$46,666.00
Balance of		<u>\$303,000.00</u>

CIT interest was 10% of the unpaid balance and is not included.

Present Rental Contract

Source of Funds: DEC through its line of credit.
Minimum Duration of Contract: 12 months.
Payment Plan: 1/30 of Purchase Price per Month (\$33,333,33/mo.)
Equity: 75% of first 12 monthly payments. 50% of second 12 monthly payments.
12 month Total Payments: \$400,000.
Effect on DEC Profit for Fiscal 1965: About Breakeven.

New Loan Possibility

Source of Funds: Bank
Purchase Price: \$1,000,000 - 45,360 (Memory Discounts) = \$954,640.
Down Payment: (\$100,000 or \$200,000)
Interest: Assumed 6%
Loan Duration: 3 or 4 years.
Duration of DEC Guarantee: 3 or 4 years.

Assume 6 year life for depreciation and investment credit purposes.

	<u>Down Payment 100K</u>		<u>Down Payment 200K</u>		<u>Rental</u>
	<u>3 year</u>	<u>4 year</u>	<u>3 year</u>	<u>4 year</u>	
12 months cash	\$431,885	\$361,733	\$493,051	\$431,108	\$400,000
12 month tax reduction	<u>232,469</u>	<u>233,003</u>	<u>229,719</u>	<u>230,190</u>	<u>200,000</u>
NET	\$199,416	\$128,730	\$263,332	\$200,918	\$200,000
24 months cash	\$747,678	\$610,646	\$771,010	\$650,896	\$800,000
24 month tax reduction	<u>359,036</u>	<u>361,740</u>	<u>354,036</u>	<u>356,865</u>	<u>400,000</u>
NET	\$388,642	\$248,906	\$416,974	\$294,031	\$400,000

Harlan E. Anderson

HEA:ncs

Adams file

060 INTEROFFICE MEMORANDUM

DATE May 11, 1965

SUBJECT Financing Proposal for Adams PDP-6

TO Board of Directors FROM R. Mills

After our meeting of April 13th we contacted Charles Adams Assocs. to propose that they consider purchasing the equipment we now have on a lease agreement with them. The result was affirmative after proposal by Adams to their board of directors. The following conditions of the purchase are as agreed to by Morgan Guaranty, CIT, and Adams:

Equipment

As shown in present lease agreement for a total of \$990,022.

Financing Participation

			Interest
Morgan	- 50%	\$495,000	5 1/2%
CIT	50%	\$495,000	9%
DEC	-0-	-0-	

No down payment

Security Position

- Morgan - secured by first Mortgage on equipment
- CIT - secured by second Mortgage on equipment

DEC Obligations

DEC - gives a guarantee of 100% of outstanding notes until 36 monthly payments have been made by Adams thru Keydata. Approximately 75% of loan will be paid off before DEC is considered to be released from its guarantee. CIT has agreed to consider relieving DEC of its guarantee after 36 instalments are paid (possibly 30) if the instalments are paid promptly and if Keydata is in a financial condition not substantially worse than at present.

Note: Late financials for Adams and Keydata have been requested.

DEC Additional Protection

Additional protection for DEC could be obtained if Adams will allow negative covenants in the agreement on Accounts Receivable, Inventories and Fixed Assets. This would give us a much quicker reaction time if operating conditions at Keydate are not favorable.

Keydate Repayment Schedule

<u>Year</u>	<u>Payments</u>	<u>Total</u>	<u>General</u>
1st year	10 @ 24K	\$ 240K	<u>Start 9/30/65</u>
2nd year	12 @ 24K	288K	Interest payable
3rd year	12 @ 16K	192K	monthly on unpaid
4th year	12 @ 12K	144K	balance. -
5th year	12 @ 8K	96K	Morgan 5 1/2%
6th year	12 @ 2.5K	<u>30K</u>	(1) CIT 9%
Total		\$ 990K	

90 day grace period
from 6/30/65.

(1) Note: previously 10%

Default Action

If any instalment remains unpaid for a period of 61 days it shall be considered default and DEC's guarantee will be called upon. DEC then obtains the instruments, which carry with them the full security interest held by Morgan and CIT. DEC then looks to Keydata for payment or the return of the equipment.

Cash Flow

It has been agreed to by Morgan and CIT that each will deliver its check to DEC on the day that papers are passed - tentatively on June 15, 1965 but hopefully no later than June 26, 1965.

Disc and drum operation is essential to the final acceptance and consummation of this sale.

**INTEROFFICE
MEMORANDUM**

DATE April 16, 1965

SUBJECT CIT Financial Corporation

TO Adams File
cc: Dick Mills

FROM Harlan Anderson ✓

Bill Congleton had spoken to a friend of his named Hudson Connery whom I believe is in charge of the CIT office in Boston. His telephone number is Hu-2-6100 and his home phone is 235-4729. They discussed the possibility of CIT playing some lease role in the Adams Associates' situation. One possibility is to lease the equipment to DEC for a sixty month period at a rate of \$21 dollars per thousand per month. The next three years would be at a rate of 1/4 of 1% of the original purchase price per month. At the end of that time, the equipment could be purchased for 7% of the original purchase price. This is equivalent I believe to 10% interest.

In case the bank loan arrangement with Adams and someone like the Morgan Guaranty Trust Company does not work out, this might be a reasonable alternative to take in order to get the cash in. I believe the fact that CIT wants to lease to us rather than directly to Adams is a reflection of Adams' credit although this point should be explored further. The other problem with this arrangement is that we do not own the machine and if we were to continue with our present contract with Adams, we would have no convenient way of providing the equity which is part of the present contract. I told Mr. Connery that I would call him on Tuesday, April 20th to discuss a time to get together to explore the matter further. Bill Congleton probably would like to be in on any such discussion.

Andy

HEA:ncs



INTEROFFICE
MEMORANDUM

COMPANY CONFIDENTIAL

DATE April 13, 1965

SUBJECT Adams PDP-6

TO DEC Board of Directors

FROM Harlan E. Anderson

At the present time, a rental contract exists between DEC and Charles Adams Associates, Inc. for a PDP-6 computer. In November 1964, there was a detailed investigation of the possibility of this PDP-6 being sold to Adams with a guarantee of a bank loan to Adams by DEC. No action was taken.

This subject is being reopened at this time in the interest of aiding DEC cash flow and profits for the year ending 25 June 1965 and in the interest of aiding Adams cash flow and providing minimum total cost to Adams.

Original Loan

Source of Funds:	50% Morgan Guaranty Trust Company 50% CIT Financial Corporation
Duration of Loan:	30 months.
Duration of DEC Guarantee:	30 months.
Payment Plan:	No Down Payment.

Morgan

	12 months @	\$11,666.67
next	12 months @	23,333.20
next	month @	46,666.68
next	month @	23,333.20

Morgan interest was 5½% of the unpaid balance and is not included.

CIT

next	4 months @	\$46,666.00
Balance of		<u>\$303,000.00</u>

CIT interest was 10% of the unpaid balance and is not included.

Present Rental Contract

Source of Funds:	DEC through its line of credit.
Minimum Duration of Contract	12 months.
Payment Plan:	1/30 of Purchase Price per Month (\$33,333,33/mo.)
Equity:	75% of first 12 monthly payments. 50% of second 12 monthly payments.
12 month Total Payments:	\$400,000.
Effect on DEC Profit for Fiscal 1965:	About Breakeven.

New Loan Possibility

Source of Funds:	Bank
Purchase Price:	\$1,000,000 - 45,360 (Memory Discounts) = \$954,640.
Down Payment:	(\$100,000 or \$200,000)
Interest:	Assumed 6%
Loan Duration:	3 or 4 years.
Duration of DEC Guarantee:	3 or 4 years.

Assume 6 year life for depreciation and investment credit purposes.

	<u>Down Payment 100K</u>		<u>Down Payment 200K</u>		<u>Rental</u>
	<u>3 year</u>	<u>4 year</u>	<u>3 year</u>	<u>4 year</u>	
12 months cash	\$431,885	\$361,733	\$493,051	\$431,108	\$400,000
12 month tax reduction	<u>232,469</u>	<u>233,003</u>	<u>229,719</u>	<u>230,190</u>	<u>200,000</u>
NET	\$199,416	\$128,730	\$263,332	\$200,918	\$200,000
24 months cash	\$747,678	\$610,646	\$771,010	\$650,896	\$800,000
24 month tax reduction	<u>359,036</u>	<u>361,740</u>	<u>354,036</u>	<u>356,865</u>	<u>400,000</u>
NET	\$388,642	\$248,906	\$416,974	\$294,031	\$400,000

Harlan E. Anderson

HEA:ncs

SECURITY AGREEMENT - CHATTEL MORTGAGE

Charles W. Adams Associates, Inc., Debtor, and Morgan Guaranty Trust Company of New York, Secured Party, with addresses as they appear with their signatures below, agree as follows:

I. Creation of Security Interest. Debtor hereby grants to Secured Party a security interest in the Collateral described in Paragraph II to secure the performance or payment of the obligations of Debtor to Secured Party under Paragraph III.

II. Collateral. The Collateral of this Security Agreement is equipment of the following description: One Digital Equipment Corp. PDP-6 computer and disc file with serial No. _____, and all additions and accessories thereto, all or a part of which will be installed in, affixed to or attached to the real estate situated or kept at _____, Massachusetts.

III. Debtor's Obligations.

A. Obligation to Pay. Debtor shall pay to Secured Party the sums evidenced by the promissory note executed in connection with the advance made subsequent to and pursuant to this Security Agreement in accordance with the terms of the note.

(1) Collection Costs. Debtor shall pay to Secured Party reasonable costs of collection of money due and unpaid including reasonable attorneys' fees.

(2) Acceleration. Upon default, Debtor shall pay immediately to Secured Party, if Secured Party so elects, the entire amount remaining unpaid under this Security Agreement.

(3) Commitment Fee. At the time the advance is made, Debtor shall pay Secured Party a commitment fee of 1/2 of 1% per annum for the period from the date of this Security Agreement to the day the advance is made.

(4) Prepayment Penalty. Debtor will pay a prepayment penalty of % of the outstanding principal amount if the note ~~is~~ is prepaid with funds borrowed from another lender.

B. Additional Obligations.

(1) Protection of Collateral. The Collateral

(a) Will be used primarily in the Debtor's business unless Secured Party consents in writing to another use, and

(b) Will not be misused or abused, wasted or allowed to deteriorate except for the ordinary wear and tear of its intended primary use, and

(c) Will be insured until this Security Agreement is terminated against all expected risks to which it is exposed and those which Secured Party may designate, with the policies acceptable to Secured Party and payable to both Secured Party and Debtor, as their interests appear and with duplicate policies deposited with the Secured Party, and

(d) Will be kept at ^{it} where Secured Party may inspect/ at any time unless Secured Party consents in writing in advance to its removal to another location.

(2) Protection of Security Interest.

(a) The Collateral will not be sold, transferred, or disposed of or be subjected to any unpaid charge, including taxes, or to any subsequent interest of a third person created or suffered by Debtor voluntarily or involuntarily, unless the Secured Party consents in advance in writing to such charge, transfer, disposition or subsequent interest,

except that the Collateral may be subjected to the security interest of C. I. E. Corporation provided that security interest is subordinate to the security interest of Secured Party, and

(b) Debtor will sign and execute alone or with Secured Party any Financing Statement or other document or procure any document, and pay all connected costs, necessary to protect the security interest under this Security Agreement against the rights or interests of third persons, and

(c) Debtor will reimburse Secured Party for any action to remedy a default which Secured Party elects pursuant to the terms of Paragraph VI, and

(d) The proceeds advanced by Secured Party pursuant to this Security Agreement shall be used to buy or for Debtor to otherwise acquire rights in the Collateral described in Paragraph II, and

(e) Debtor shall not attach or affix the Collateral described in Paragraph II to real estate unless provided in Paragraph II or unless Secured Party consents in writing prior to such attachment.

IV. Secured Party's Obligations. Secured Party shall advance \$490,000 on or before March 1, 1965, after Debtor receives possession of the Collateral from Digital Equipment Corp. for the purpose of enabling the Debtor to pay for the Collateral.

V. Default. Misrepresentation or misstatement in connection with, noncompliance with or nonperformance of any of Debtor's Obligations or Agreements under Paragraphs III and VIII shall constitute default under this Security Agreement. In addition, Debtor shall be in default if bankruptcy or insolvency proceedings are instituted by or against the Debtor or if Debtor makes any assignment for the benefit of creditors.

VI. Secured Party's Rights and Remedies.

A. Secured Party may assign this Security Agreement and ^{the} Assignee

shall be entitled, upon notifying the Debtor, to performance of all Debtor's Obligations and Agreements under Paragraphs III and VIII and the Assignee shall be entitled to all of the rights and remedies of Secured Party under this Paragraph VI.

B. Upon Debtor's default, Secured Party may exercise its rights of enforcement under the Uniform Commercial Code in force in Massachusetts at the date of this Security Agreement and, in conjunction with, addition to, or substitution for, those rights, at Secured Party's discretion, may

(1) Enter upon Debtor's premises to take possession of, assemble and collect the Collateral or to render it unusable, and

(2) Require Debtor to assemble the Collateral and make it available at a place Secured Party designates which is mutually convenient, to allow Secured Party to take possession or dispose of the Collateral, and

(3) Waive any default or remedy any default in any reasonable manner without waiving the default remedied and without waiving any other prior or subsequent default, and

(4) Give any notice or notification to the Debtor required by the Uniform Commercial Code by mailing such notice, postage prepaid, at least 5 days before the event, if any, which is the subject of the notice, to Debtor's address as it appears at the end of this Security Agreement, and

(5) Incur reasonable attorneys' fees and legal expenses in exercising any of its rights and remedies upon Debtor's default which shall become part of its reasonable expenses of retaking, holding, preparing for sale and the like.

C. Secured Party may act as attorney for the Debtor in obtaining, adjusting, settling and canceling any insurance covering the Collateral and in endorsing any draft.

VII. Rights and Remedies of Debtor. Debtor shall have all of the rights and remedies before or after default provided in Article 9 of the

Uniform Commercial Code in force in Massachusetts at the date of this Security Agreement.

VIII. Additional Agreements and Affirmations.

A. Debtor's Agreements and Affirmations

(1) That information supplied and statements made by it in any financial or credit statement or application for credit prior to this Security Agreement are true and correct, and

(2) That no Financing Statement covering the Collateral or its proceeds is on file in any public office and that, except for the security interest granted in this Security Agreement, there is no adverse lien, security interest or encumbrance in or on the Collateral, and

(3) That the address of Debtor's place of business inasmuch as appears below his signature, and

(4) That Debtor will maintain a minimum working capital of \$ _____ . "Working capital" shall mean the remainder arrived at by subtracting Debtor's current liabilities from its current assets.

For the purpose of this computation, "current assets" shall include _____ and "current liabilities" shall include _____

B. Mutual Agreements.

(1) "Debtor" and "Secured Party" as used in this Security Agreement include the successors or assigns of those parties.

(2) The law governing this Secured Transaction shall be that of the State of Massachusetts in force at the date of this Security Agreement.

EXECUTED This _____ Day of _____, 196 .

MORGAN GUARANTEE TRUST COMPANY
OF NEW YORK

CHARLES W. ADAMS ASSOCIATES, INC.

By _____

By _____

23 Wall Street, New York 15, N.Y.

Address of Chief Place of Business

\$490,000

New York, New York

196

The undersigned promises to pay to the order of Morgan Guaranty Trust Company of New York at its principal office at 23 Wall Street, New York 15, New York, \$490,000 in the following manner: 12 monthly principal repayments of \$41,666.67 each, and followed by 12 monthly principal repayments of \$23,333.34 each, followed by one monthly payment of \$46,666.68 and a final monthly payment of \$23,333.20, with interest on the unpaid balance, at the rate of 5 1/2% per annum, payable with each installment of principal. The first monthly payment called for by this note shall be due on the day of _____, 196 , and the subsequent installments shall be due on the same day of each of the next 25 months.

This note is executed pursuant to a Security Agreement between the payee and the maker dated _____, 196 , and is secured by the Collateral provided therein.

The Debtor will acquire rights in such Collateral ~~proceeds~~ with the proceeds of this note.

The Security Agreement specifies certain events of default and upon the occurrence of any one or more of them this note may be declared to be immediately due and payable as provided in the Security Agreement.

If any installment of this note becomes due or payable on a Saturday, Sunday or public holiday under the laws of the State of New York, maturity shall be extended to the next succeeding business day and interest thereon shall be payable at the above rate during such extension.

This note shall be governed by and construed in accordance with the laws of the State of New York.

CHARLES W. ADAMS ASSOCIATES, INC.

BY _____

The undersigned guarantees the payments of principal and interest called for by this note and hereby waives demand, notice and protest, and

assents to any extension or postponement of the time of payment or other
incidence and to any substitution, exchange or release of Collateral
granted or permitted by the holder.

This guaranty shall be governed by and construed in accordance
with the laws of the State of New York.

DIGITAL EQUIPMENT CORP.

By _____

Morgan Guaranty Trust Company of New York
 23 Wall Street
 New York, New York 10015

Dear Sirs:

Re: Charles W. Adams Associates, Inc. -
Subordination of Security Interest

C. I. T. Corporation, having or acquiring a security interest in a certain computer and disc file manufactured by Digital Equipment Corp. and sold to Charles W. Adams Associates, Inc., hereby agrees that any security interest it may now or hereafter have shall be subordinate to the security interest of Morgan Guaranty Trust Company of New York, Secured Party in a Security Agreement with Charles W. Adams Associates, Inc., Debtor, dated _____, 196____, in the following Collateral as described in the Security Agreement: One Digital Equipment Corp. PDP-5 computer and disc file with serial No. _____, and all additions and accessories thereto, all or a part of which will be installed in, affixed to or attached to the real estate situated or kept at _____, Massachusetts.

Very truly yours,

C. I. T. Corporation

By _____

Equipment Lease with Option to Purchase

Digital Equipment Corporation, 146 Main Street, Maynard, Massachusetts (DEC) agrees to lease to Charles W. Adams, Associates, Inc., 142 The Great Road, Bedford, Massachusetts (hereinafter referred to as the Customer) a PDP-6 computing system consisting of the items of equipment listed on Exhibit A hereto, (hereinafter collectively called the equipment) on the terms hereinafter set forth.

This Equipment Lease with Option to Purchase supersedes an earlier agreement relating to the sale of a similar system. DEC and the Customer agree that their respective rights and obligations are set forth in their entirety in this Equipment Lease with Option to Purchase and any amendments hereto.

DEC agrees to provide the following software:

MACRO-6 Assembler

FORTRAN II Compiler

DDT-6 Program Debugging Aid

Editor Program

Delivery of all the equipment except the Type 270 Disc and related hardware and the Core Memory Parity Option will be made from Maynard on or before February 22, 1965, or five weeks after the effective date of this agreement whichever is later. Delivery of the Type 270 Disc and related hardware will be made from Maynard on or before April 1, 1965, except that if the disc is not delivered to DEC on or before February 1, 1965, the April 1, 1965 date shall be extended by an interval equal to the interval between February 1, 1965 and such delivery to DEC. The Core Memory Parity Option will be installed within one month after the equipment less the disc has been installed and has passed all acceptance tests.

The equipment will be located at 575 Technology Square, Cambridge, Massachusetts.

C
O
P
Y

I. Terms and Conditions of LeaseTerm of Lease

This lease shall continue in effect for one year for all the equipment from the later of (a) the date the equipment including the Type 270 Disc is installed ready for use and has completed the acceptance tests, or (b) May 1, 1965. It may be terminated by the Customer, with respect to any item of equipment at the end of said year or at the end of any calendar month thereafter, provided written notice is received by DEC three months prior to the termination date.

Monthly Rental Charges

The monthly rental charges plus the special maintenance service fee for the equipment as specified in Exhibit A begin on the day following that on which all the equipment is installed, ready for use and has completed the acceptance tests. The total monthly charge for each month will be invoiced in advance on the first of the month and each such invoice will be payable in full within thirty days of the date of the invoice without discount, provided that the first invoice shall include the pre-acceptance service fee and if all the equipment is installed, ready for use and has completed the acceptance tests before May 1, 1965, the first invoice will be dated May 1, 1965, will be payable May 31, 1965 and will include any rental charges for the time prior to May 1, 1965, as well as the pre-acceptance service fee.

C
O
P
Y

- 3 -

There shall be added to the above monthly rental charges amounts equal to any taxes, however designated, levied or based on such charges or on this lease or on the equipment or their use, including state and local privilege or excise taxes based on gross revenue and any taxes or amounts in lieu thereof paid or payable by DEC in respect of the foregoing, exclusive, however, of taxes based on the net income of DEC.

Acceptance Tests

DEC will demonstrate to the satisfaction of the Customer's representative appointed by the Customer for this purpose that the equipment and the software function in accordance with the claimed performance as demonstrated by (1) successful completion of DEC's standard acceptance test procedures and programs set forth in Exhibit B hereto and (2) successful completion of the Customer's special test programs and procedures set forth in Exhibit C hereto.

The Customer will bear all costs of preparation and checking of the special test programs and procedures set forth in Exhibit C. In no event can the final testing of the system be delayed by nonavailability of such special programs.

The equipment shall not be deemed to be acceptable until all of the equipment is installed ready for use and has completed the acceptance tests.

All acceptance tests specified in Exhibit B and C, pertaining to both hardware and software, are expected to be performed with no detected error or abnormality of any sort

C
O
P
Y

- 4 -

throughout the entire period of the individual test, except ones of an inconsequential nature which may, at the sole discretion of Customer, be overlooked.

Each of the extended tests of the magnetic drum and magnetic disc shall commence within fifteen minutes after power has first been applied to the system following a shutdown of not less than two hours and shall continue throughout the stated period without interruption. During the last hour of each test, Customer shall have the option of interrupting the main power to the system on as many as ten separate occasions at times and for time intervals determined by Customer.

The customer may not use any of the equipment prior to the acceptance of all of the equipment except under the conditions of pilot operation described below.

Pilot Operation

In recognition of the importance to both DEC and Customer of a period of pilot operation in which Customer undertakes to offer substantially full service to a few selected subscribers of its on-line, real-time system, DEC will endeavor to put the entire installation, with the possible exception of the drum, disc file or other peripheral devices, into satisfactory operating condition at as early a date as is feasible. Customer and DEC may then agree to undertake a period of pilot operation during which time Customer agrees to pay for the availability of the equipment as outlined in Pre-acceptance Fee below and DEC agrees to carry out all further installation, maintenance and acceptance tests during the hours

C
O
P
Y

- 5 -

between 6 p.m. and 8 a.m. and at such other times as Customer, acting in good faith, finds it possible to permit such installation, maintenance and testing, either by interrupting its on-line services or by providing programming to facilitate such operations concurrent with its on-line services. Items of equipment shall not be used in pilot operation until they have satisfactorily completed all appropriate acceptance tests and have been accepted by the Customer.

Prior to pilot operation, if Customer desires and DEC agrees to allow Customer to use the equipment already accepted for pre-pilot operation tests for a given day during the hours 7 a.m. to 10 p.m., Customer will pay the Pre-acceptance Fee of 1/60 of 1% of the equipment used for that given period.

Pre-acceptance Fee

In the event of pilot operation, as described above, the Customer will pay DEC a pre-acceptance service fee based on the total list price of the items of equipment placed in pilot operation. The pre-acceptance service fee shall be equal to the product of (a) 1/60 of 1% of the price of the equipment involved and (b) the number of days from the date such pilot operation commences until the date all the equipment is installed, ready for use and has completed the acceptance test. As additional items of equipment become available, they may be included in the pilot operation with appropriate adjustments in the pre-acceptance service fee.

C
O
P
Y

- 6 -

Supplies

All supplies used in conjunction with the equipment are to be provided by the Customer and shall meet DEC specifications.

Maintenance

DEC will install the equipment at no additional cost to the Customer, and will make every reasonable effort not to disrupt the pilot operations of any equipment previously installed. The Customer will supply suitable building space, power, lighting, and air conditioning, and give DEC staff free access to the equipment for installation and testing prior to acceptance. The Customer will provide working space other than the computer room and not to exceed 144 square feet for DEC maintenance personnel, including storage space for tools, test equipment and spare parts.

DEC will keep the equipment in good working order and will make all necessary adjustments and repairs. In consideration of the fact that Customer intends to offer on-line, real-time data processing services during the hours between 7 a.m. and 10 p.m. on normal weekdays and 7 a.m. to 1 p.m. on Saturday, DEC agrees to perform all maintenance of a nonemergency nature (i.e., scheduled preventive maintenance and maintenance required to correct degeneration of performance of equipment items where such degeneration has not resulted in significant interference with normal on-line operation) during the hours outside of Customer's on-line service period, and Customer agrees to pay a special maintenance service fee equal to 2-1/2% of the monthly rental charge. DEC reserves the right to make adjustments in the

C
O
P
Y

- 7 -

special maintenance service fee after the first 12-month rental period. DEC shall give the Customer written notice at least 30 days in advance of such adjustment.

Customer agrees wherever possible to permit maintenance to be performed during its on-line hours whenever such maintenance can be performed without significant interference with its on-line service, and will undertake reasonable amounts of programming without charge to DEC where required to permit such maintenance during on-line periods of operation.

DEC shall have complete and free access to the equipment. Charges for any repairs or replacements due to the negligence of the Customer will be borne by the Customer. Suitable electric current to operate electrically operated equipment and a suitable place of installation with all facilities as specified by DEC will be furnished by the Customer. The facilities already installed or explicitly proposed by Customer at 575 Technology Square have been examined by DEC and are adequate for its needs.

Insurance

DEC and its insurers, if any, shall relieve the Customer of all risk of loss of or damage to the equipment during the term hereof, however occasioned.

Alterations and Attachments

Upon prior written authorization from DEC alterations in or attachments to the equipment may be made. If the alteration or attachment interferes with the normal and satisfactory operation

C
O
P
Y

- 8 -

or maintenance of the equipment in such a manner as to increase substantially the cost of maintenance thereof, or create a safety hazard, the Customer will, upon notice from DEC to that effect, promptly remove the alteration or attachment and restore the equipment to its normal condition.

Transportation and Traveling Expenses

All transportation and rigging charges for the equipment, both from and to the DEC plant, are to be paid by the Customer. Packing cases for the equipment and a representative to supervise the packing and unpacking will be furnished by DEC without charge. The equipment covered by this agreement is not to be moved from the location stated on the first page hereof without the prior written consent of DEC. The Customer will furnish such labor as may be necessary to change location when the equipment is in the possession of the Customer.

Warranty

DEC warrants that the equipment when installed will be in good working order, and free of manufacturing, materials, and design defects. All equipment is supplied subject to these warranties, and DEC's obligation thereunder is limited to repair or replacement of any parts of the equipment when DEC determines that the equipment does not conform to these warranties.

The foregoing warranties are in lieu of all other warranties expressed or implied, and of all obligations or liabilities on the

C
O
P
Y

- 9 -

part of DEC for damages, including but not limited to consequential damages, arising out of or in connection with the use or performance of the equipment.

Miscellaneous

The equipment remains the personal property of DEC and may be removed by DEC at any time after the termination of this lease, except to the extent that the Customer elects to exercise the option to purchase provided below. The Customer shall not do, permit or suffer any act or thing whereby DEC's title or rights to the equipment may be encumbered or impaired. DEC shall have the right to mark or label the equipment adequately to evidence its ownership, such markings being adequate to meet legal requirements for establishing ownership but otherwise as inconspicuous as possible and of adequate dignity and decorum.

If the drum system is not completely operational by April 1, 1965, DEC will, at no cost to the Customer lend to the Customer a Type 161 memory module for a period of six months commencing 1 April 1965.

II. Terms and Conditions of Option to Purchase

DEC grants to the Customer a nonassignable option to purchase from DEC on the following terms and conditions all of the equipment described on Exhibit A hereto.

The Customer may exercise the option to purchase all of the equipment to take effect on or after installation by written notice to DEC referring to this equipment lease.

C
O
P
Y

- 10 -

The option for the equipment is valid only as long as the equipment continues under the lease arrangement established in Part I of this equipment lease until the effective date of purchase hereunder.

If the option is exercised, it must be exercised for all of the equipment. If the Customer elects to exercise the option to purchase, the purchase will be subject to the terms and conditions of purchase which follow.

III. Terms and Condition of Purchase

Effective Date of Purchase

A purchase shall be effective on or after installation on the day following receipt by DEC of the Customer's written notice of exercise of the option. Equipment purchased will be discontinued under the lease arrangement established in Part I of this agreement as of the day immediately preceding such effective date. The Customer shall pay all charges with respect to such equipment due under the lease arrangement.

Price

The price for the equipment shall be the purchase price set forth in Exhibit A hereto less a credit equal to the sum of (1) 75 percent of the total rental charges paid by the Customer under this equipment lease in respect of the first twelve months hereof and (2) 50 percent of the total rental charges paid by the Customer in respect of equipment for the 24-month period following the

C
O
P
Y

- 11 -

first twelve-month period specified in Clause 1. No credit is available in respect of rental charges paid after 36 months.

There shall be added to the above price an amount equal to any taxes, however designated, levied or based on such price or on this agreement or the equipment, including state and local privilege or excise taxes based on gross revenue, and any taxes or amounts in lieu thereof paid or payable by DEC in respect of the foregoing, exclusive, however, of taxes based on net income.

Terms of Payment

Payment for the equipment shall be made in full within thirty days after the date of invoice. The invoice shall be dated as of the effective date of purchase.

Title

Title to the equipment is to remain in DEC until the full purchase price is paid. Failure to pay the purchase price of the equipment when due shall give DEC the right, without liability, to repossess such equipment, with or without notice, and to avail itself of any legal remedy.

Risk of Loss

During the period the equipment is in transit or in possession of the Customer up to the effective purchase date DEC and its insurers, if any, relieve the Customer of all risk of loss of or damage to the equipment. After the effective date of purchase, the risk of loss or damage shall be on the Customer.

C
O
P
Y

- 12 -

Warranty

DEC warrants the equipment purchased to be in good working order on the effective date of purchase.

DEC will keep any item of equipment which has been installed for less than one hundred eighty days under the lease arrangement established in Part I of this agreement in good working order through the one hundred eightieth day after installation. At the Customer's request during the warranty period, DEC will make all necessary adjustments, repairs and parts replacements. All replaced parts will be come the property of DEC on an exchange basis. This warranty will not apply if such adjustment, repair or parts replacement is required because of accident, neglect, misuse, failure of electric power, of air conditioning, or of humidity control or causes other than ordinary use, caused by someone other than DEC. Neither shall it apply to any equipment modified without the approval of DEC or to damage caused by transportation by someone other than DEC.

DEC shall have full and free access to the equipment to perform this service. DEC shall not be responsible for failure to render service due to causes beyond its control. This warranty shall apply only to the original Customer. DEC shall not be required to adjust or repair any piece of equipment or part if alterations or attachments interfere with normal safe access.

The foregoing warranties are in lieu of all other warranties expressed or implied, and of all obligations or liabilities on the part of DEC for damages, including but not limited to consequential damages, arising out of or in connection with the use or performance of the equipment.

C
O
P
Y

- 13 -

Maintenance Service and Parts

DEC will, if requested, provide the Customer with maintenance service for the equipment after the exercise of the option to purchase, and repair or replace parts, as long as they are generally available, on the basis of DEC's established prices and terms prevailing at the time.

Patent

DEC shall indemnify the Customer against liability, including costs arising out of claims that any of the items of equipment or any parts thereof covered by this agreement infringe any United States Letters Patent. The foregoing indemnity shall not apply unless DEC shall have been informed as soon as practicable by the Customer of the suit or action alleging such infringement, and shall have been given opportunity to participate in the defense thereof.

IV. Additional Products

1. DEC offers the Customer two-month delivery on a second Type 630 Data Communication System identical to the Type 630 Data Communication System included in this agreement. This offer is good for twelve months from date of this agreement. DEC's standard prices, terms and conditions in effect at the time of the order shall apply to this equipment.

2. DEC offers the Customer six-month delivery on a second magnetic drum system identical to the magnetic drum system incorporated into the system. This offer is good for eight

C
O
P
Y

- 14 -

months from date of this agreement. DEC's standard prices, terms and conditions in effect at the time of the order shall apply to this equipment.

V. General

DEC will provide at no additional cost, programmer training for five personnel of the Customer. These programming courses will be conducted at the DEC factory in Maynard at a time mutually agreed upon and will be oriented towards the use of MACRO-6, PDP-6 FORTRAN, DDT, and other software. In addition, five personnel of the Customer may attend maintenance training classes at the DEC factory without charge.

Twenty copies of the manuals describing the software will be provided to the Customer without additional charge. A reasonable number of additional copies including subsequent additions and corrections will also be supplied in the future. Two copies of the Maintenance Manual will be provided on installation.

Neither this agreement nor any of Customer's rights hereunder shall be assignable except with the written consent of DEC, and the terms and conditions hereof shall bind any permitted successors and assigns of the Customer. If DEC assigns the rents reserved herein, or all or any of its other rights hereunder, the rights of its assignee shall be independent of any claim of the Customer against DEC; the Customer on receiving notice of any such assignment shall abide thereby and make payment as may therein be directed.

C
O
P
Y

- 15 -

Either party may terminate this agreement for failure of the other party to comply with any of its terms and conditions.

This agreement shall be governed by the laws of the Commonwealth of Massachusetts. This constitutes the entire agreement between the Customer and DEC with respect to the lease and the purchase and sale of the equipment and no representation or statement not contained in this agreement shall be binding upon DEC as a warranty or otherwise. The foregoing terms and conditions shall prevail notwithstanding any variance with the terms and conditions of any prior agreement between DEC and the Customer in respect of the equipment.

C
O
P
Y

M E M O R A N D U M

TO: Mr. Harlan E. Anderson
FROM: Mr. Bail
RE: DEC - Adams Associates

When I talked with Mr. Frederic A. Rubinstein yesterday, I had barely had time to read the latest proposed draft of the agreement once since learning of Mr. Testa's illness. Therefore, I made it very plain that I was not agreeing to anything. So far as any suggested wording appears below, it was used only in attempting to state what Mr. Rubinstein wanted, and was not put forth as a tentative agreement.

On Monday the fourth, I shall check up on how matters stand. I will reserve all of Tuesday if necessary to work on the matter so that if need be it could be concluded next week even if Mr. Testa is completely unavailable. If it is at all possible, I hope that he may stay home until he is completely cured.

I have inserted numbers against the following items purely for my own convenience.

1. On the first page opposite MACRO-6 Assembler, Mr. Rubinstein would like to have the following inserted "(capable of DEC Tape to DEC Tape Assembly)".

2. On the first page opposite FORTRAN II Compiler, Mr. Rubinstein would like the following to be inserted "(expanded rules version)".

3. Mr. Rubinstein would like the agreement to provide for delivery of the software on or before January 22, 1965 even though the delivery of the other material may be delayed. In reference to Dick's suggested language of "about" April 1, 1965 Mr. Rubinstein would like "on or before".

*Can't do!
update
versions
are import.*

4. Mr. Rubinstein would like only thirty days' notice of termination rather than three months.

No!

5. Mr. Rubinstein wanted the first monthly payment to be delayed until June. I understand from you that it may not be delayed later than the end of May, as in Dick Testa's draft. I understand that before the full term of the Lease begins Adams is to pay what Dick has described at the bottom of page 3 of his most recent proposed substitute pages, as a pre-acceptance service fee, and that the monthly rental is to be payable by the thirtieth day of the month for which it is incurred, except that no bill is to be rendered for rental charges

See .p. 4.

Inappropriate.

until May 1, payable May 30. Up to this point the draft does not make it clear when the pre-acceptance service fee will be billed or be payable. I assume that it should be included in the May rental invoice. Mr. Rubinstein purported to interpret the first draft as indicating that the first rental payment might become payable for the first month some time after the term of the Lease began, so that it would be "out-of-phase", so to speak. He asked if it was intended that such mis-match might continue so that the last payment would be due a corresponding period after the end of the Lease. I understand from you that this is not intended. While perhaps he should not have so interpreted the language, in drafting I like to proceed on the assumption that if one person has misunderstood language, whether he was justified or not, this indicates that somebody else may likewise misunderstand it and it is wise to fix the language. Furthermore, I don't recall seeing anything in the body of the Lease stating that the amount of the monthly rental charge is stated on Exhibit A. Accordingly, I suggest to you that the first paragraph of Dick's suggested revision of the monthly rental charges paragraph should read as follows:

as specified in Exhibit A.

The monthly rental charges for the equipment^x begin on the day following that on which all the equipment is installed, ready for use and has completed the acceptance tests. The monthly rental charge for each month will be invoiced in advance on the first of the month and each such invoice will be payable in full within thirty days of the date of the invoice without discount, provided that the first invoice shall include the pre-acceptance service fee and if all the equipment is installed, ready for use and has completed the acceptance tests before May 1, 1965, the first invoice will be dated May 1, 1965, will be payable May 31, 1965 and will include any rental charges for the time prior to May 1, 1965, as well as the pre-service acceptance fee.

x

6. Mr. Rubinstein said he did not understand the meaning of the sentence "in no event can the final testing of the system be delayed by non-availability of such special program". This is under the second paragraph heading "Acceptance Tests". I don't know just what he did not understand about it. Perhaps I will understand better when I see Exhibit C.

*Stan.
Proc.*

7. Mr. Rubinstein thought the specifications as to hardware were not sufficiently specific. My notes do not indicate in what respect he thought they were insufficient. All I have are some notes on software which are reflected above.

How?

8. Following the first sentence under "Maintenance", Mr. Rubinstein would like something to be inserted along the following line "and will make every reasonable effort not to disrupt the private operation of any equipment previously installed". After talking about the first paragraph, he said that a similar provision against the disruption ought to be made in the second paragraph and that, indeed, work ought to be limited to evenings and week ends. I said that if that were done, it should certainly be expressed definitely in terms of days and hours of the day. I thought at the time that he was referring to the first paragraph, but now I notice that the second paragraph as submitted refers to DEC's regular working hours, so now I am not sure what he had in mind.

No!
Extra

9. In the second sentence under "Warranty" Mr. Rubinstein would like the word "promptly" inserted after the third word.

ok

10. At the end of that paragraph he suggested taking out the word "transportation" and adding the following: "Caused by someone other than DEC or by transportation by someone other than DEC".

OK
new
sentences.

11. Mr. Rubinstein would like clarification of the word "impracticable" which is in about the fifth line of the next paragraph.

New
sentences

12. Under the heading "Patent" Mr. Rubinstein would like insertion of the words "or any parts thereof" immediately after the word "equipment" at the end of the second line.

OK

13. In the fourth line under the heading "Additional Products" Mr. Rubinstein would like "12" instead of "8".

OK

14. At the end of the first paragraph under the heading "General" my notes indicate that Mr. Rubinstein suggested "complete access to the evenings or week ends".

NOT APPROP.

15. Finally, Mr. Rubinstein suggested that DEC agree to lend ~~two~~^{one} 161 core memories until the drum is operational, and that if a drum was operational but not operating at full capacity another drum would be provided to bring the equipment to full capacity. April 1

GASTON, SNOW, MOTLEY & HOLT

WARREN MOTLEY
F. T. HAMMOND, JR.
ROY M. ROBINSON
JOSEPH P. ROONEY
FRANCIS R. HINES
ARTHUR R. SCHMIDT
PAUL V. POWER
ANDREW M. WOOD
F. D. HERBERICH
LAWRENCE P. MANNING
JAMES M. STOREY
ROGER M. THOMAS

ROBERT H. HOLT
EARLE W. CARR
ROBERT H. HOPKINS
CHARLES JACKSON, JR.
GARDNER CUSHMAN
RICHARD N. BAIL
CALEB LORING, JR.
JOHN B. PIERCE, JR.
HARRY F. RICE, JR.
N. U. SOMMERFELD
GORDON K. BELL
JOHN W. BELASH

ANSEL B. CHAPLIN
ERNEST V. KLEIN
ROBERT S. PIRIE
RICHARD M. REILLY

STEPHEN A. MOORE
RICHARD J. TESTA
WILLIAM F. KEHOE
DAVID M. ELWOOD

SHAWMUT BANK BUILDING
82 DEVONSHIRE STREET
BOSTON, MASSACHUSETTS 02109

AREA CODE 617 CAPITOL 7-3180
CABLE ADDRESS: GASTOW

December 21, 1964

Frederic A. Rubenstein, Esq.
Guggenheimer & Untermyer
80 Pine Street
New York 5, New York

Re: Digital Equipment Corporation -
Charles W. Adams Associates, Inc.

Dear Fred:

Enclosed is the Form of Equipment
Lease with Option to Purchase.

Sincerely,

Richard J. Testa

RJT:mag

Enclosure

cc: Mr. Charles W. Adams
Mr. Harlan E. Anderson ✓
Mr. Robert J. Beckman

Equipment Lease with Option to Purchase

Digital Equipment Corporation (DEC) agrees to lease to Charles W. Adams Associates, Inc., 142 The Great Road, Bedford, Massachusetts (hereinafter referred to as the Customer) a PDP-6 computing system consisting of the items of equipment listed on Exhibit A hereto, (hereinafter collectively called the equipment) on the terms hereinafter set forth.

This equipment lease with option to purchase supersedes an earlier purchase contract relating to the same system. DEC and the Customer agree that their respective rights and obligations are set forth in their entirety in this equipment lease and in the purchase agreement of even date herewith relating to the Type 270 Disc and any amendments thereto.

DEC agrees to provide the following software:

MACRO-6 Assembler
FORTRAN II Compiler
DDT-6 Program Debugging Aid
Editor Program

Delivery of all the equipment will be made from Maynard on or before February 15, 1965.

The equipment will be located at 575 Technology Square, Cambridge, Massachusetts

I. Terms and Conditions of Lease

Term of Lease

This lease shall continue in effect for one **year** for each item from the date the item of equipment is installed ready for use. It may be terminated by ^{the Customer} ~~either party~~, with respect to any item of equipment at the end of said year or at the end of any calendar month thereafter, provided written notice is received three months prior to the termination date.

Monthly Rental Charges

The monthly rental charges for each item begin on the day following that on which the item is installed and ready for use. Monthly rental charges will be invoiced on the first of each month. All invoices are payable in full within thirty (30) days of the date of the invoice without discount.

There shall be added to the above monthly rental charges amounts equal to any taxes, however designated, levied or based on such charges or on this lease or on the equipment or their use, including state and local privilege or excise taxes based on gross revenue and any taxes or amounts in lieu thereof paid or payable by DEC in respect of the foregoing, exclusive, however, of taxes based on the net income of DEC.

power, lighting, and air conditioning, and give DEC staff free access to the equipment for installation and testing prior to acceptance.

DEC will keep the equipment in good working order and will make all necessary adjustments and repairs. All maintenance will be performed during DEC's regular working hours on a five day a week basis. Any maintenance in excess of this period will be charged at DEC's regular rates. DEC shall have complete and free access to the equipment. Charges for any repairs or replacements due to the negligence of the Customer will be borne by the Customer. Suitable electric current to operate electrically operated equipment and a suitable place of installation with all facilities as specified by DEC will be furnished by the Customer.

Insurance

DEC and its insurers, if any, shall relieve the Customer of all risk of loss of or damage to the equipment during the term hereof, however occasioned.

Alterations and Attachments

Upon prior written authorization from DEC alterations in or attachments to the equipment may be made. If the alteration or attachment interferes with the normal and satisfactory operation or maintenance of the equipment in such manner as to increase substantially the cost of maintenance thereof, or create a safety hazard, the Customer will, upon notice from DEC to that effect, promptly remove

the alteration or attachment and restore the equipment to its normal condition.

Transportation and Traveling Expenses

All transportation and rigging charges for the equipment, both from and to the DEC plant, are to be paid by the Customer. Packing cases for the equipment and a representative to supervise the packing and unpacking will be furnished by DEC without charge. The equipment covered by this agreement is not to be moved from the location stated on the first page hereof without the prior written consent of DEC. The Customer will furnish such labor as may be necessary to change location when the equipment is in the possession of the Customer.

Warranty

DEC warrants that the equipment when installed will be in good working order. DEC will make all necessary adjustments, repairs and replacements without additional charge to maintain the equipment in this condition. All equipment is supplied subject to these warranties, and DEC's obligation thereunder is limited to repair or replacement of any parts of the equipment when DEC determines that the equipment does not conform to these warranties.

The foregoing warranties are in lieu of all other warranties expressed or implied, and of all obligations or liabilities on the

part of DEC for damages, including but not limited to consequential damages, arising out of or in connection with the use or performance of the equipment.

Miscellaneous

The equipment remains the personal property of DEC and may be removed by DEC at any time after the termination of this lease, except to the extent that the Customer elects to exercise the option to purchase provided below. The Customer shall not do, permit or suffer any act or thing whereby DEC's title or rights to the equipment may be encumbered or impaired. DEC shall have the right to mark or label the equipment to evidence its ownership.

II. Terms and Conditions of Option to Purchase

DEC grants to the Customer a nonassignable option to purchase from DEC on the following terms and conditions all of the equipment described on Exhibit A hereto.

The Customer may exercise the option to purchase all of the equipment to take effect on or after installation by written notice to DEC referring to this equipment lease.

The option for the equipment is valid only as long as the equipment continues under the lease arrangement established in Part I of this ^{equipment} ~~lease agreement~~ until the effective date of purchase hereunder.

If the option is exercised, it must be exercised for all of the equipment. If the Customer elects to exercise the option to purchase, the purchase will be subject to the terms and conditions of purchase which follow.

III. Terms and Conditions of Purchase

Effective Date of Purchase

A purchase shall be effective on or after installation on the day following receipt by DEC of the Customer's written notice of exercise of the option. Equipment purchased will be discontinued under the lease arrangement established in Part I of this agreement as of the day immediately preceding such effective date. The Customer shall pay all charges with respect to such equipment due under the lease arrangement.

Price

The price for the equipment shall be the purchase price set forth in Exhibit A hereto less a credit equal to the sum of (1) 75 percent of the total rental charges paid by the Customer under this equipment lease in respect of the first twelve months ^{of} ~~hereunder~~, and (2) 50 percent of the total rental charges paid by the Customer in respect of equipment for the 24-month period following the first twelve-month period specified in Clause 1. No credit is available

in respect of rental charges paid after 36 months.

There shall be added to the above price an amount equal to any taxes, however designated, levied or based on such price or on this agreement or the equipment, including state and local privilege or excise taxes based on gross revenue, and any taxes or amounts in lieu thereof paid or payable by DEC in respect of the foregoing, exclusive, however, of taxes based on net income.

Terms of Payment

Payment for the equipment shall be made in full within thirty days after the date of invoice. The invoice shall be dated as of the effective date of purchase.

Title

Title to the equipment is to remain in DEC until the full purchase price is paid. Failure to pay the purchase price of the equipment when due shall give DEC the right, without liability, to repossess such equipment, with or without notice, and to avail itself of any legal remedy.

Risk of Loss

During the period the equipment is in transit or in possession of the Customer up to the ^{effective purchase} /date of ~~acceptance~~, DEC and its insurers, if any, relieve the Customer of ~~any responsibility for~~ all risk

of loss/or damage to the equipment. After the effective date of purchase, the risk of loss or damage shall be on the Customer.

Warranty

DEC warrants the equipment purchased to be in good working order on the effective date of purchase.

DEC will keep any item of equipment which has been installed for less than one hundred eighty days under the lease arrangement established in Part I of this agreement in good working order through the one hundred eightieth day after installation. At the Customer's request during the warranty period, DEC will make all necessary adjustments, repairs and parts replacements. All replaced parts will become the property of DEC on an exchange basis. This warranty will not apply if such adjustment, repair or parts replacement is required because of accident, neglect, misuse, failure of electric power, air conditioning, humidity control, transportation or causes other than ordinary use.

DEC shall have full and free access to the equipment to perform this service. DEC shall not be responsible for failure to render service due to causes beyond its control. This warranty shall apply only to the original Customer. DEC shall not be required to adjust or repair any piece of equipment or part if it would be impractical for DEC personnel to do so because of alterations in the equipment

or its connection by mechanical or electrical means to another item of equipment or device.

The foregoing warranties are in lieu of all other warranties expressed or implied, and of all obligations or liabilities on the part of DEC for damages, including but not limited to consequential damages, arising out of or in connection with the use or performance of the equipment.

Maintenance Service and Parts

DEC will, if requested, provide the Customer with maintenance service for the equipment after the exercise of the option to purchase, and repair or replace parts, as long as they are generally available, on the basis of DEC's established prices and terms prevailing at the time.

Patent

DEC shall indemnify the Customer against liability, including costs arising out of claims that any of the items of equipment covered by this agreement infringe any United States letters patent. The foregoing indemnity shall not apply unless DEC shall have been informed as soon as practicable by the Customer of the suit or action alleging such infringement, and shall have been given opportunity to participate in the defense thereof.

IV. Additional Products

1. DEC offers the Customer two-month delivery on a second Type 630 Data Communication System identical to the Type 630 Data Communication System included in this agreement. This offer is good for eight months from date of this agreement. DEC's standard prices, terms and conditions in effect at the time of the order shall apply to this equipment.

2. DEC offers the Customer six-month delivery on a second magnetic drum system identical to the magnetic drum system incorporated into the system. This offer is good for eight months from date of this agreement. DEC's standard prices, terms and conditions in effect at the time of the order shall apply to this equipment.

V. General

DEC will provide at no additional cost, programmer training for five personnel of the Customer. These programming courses will be conducted at the DEC factory in Maynard at a time mutually agreed upon and will be oriented towards the use of MACRO-6, PDP-6 FORTRAN, DDT, and other software. In addition, five personnel of the the Customer may attend maintenance training classes at the DEC factory without charge.

Twenty copies of the manuals describing the software will be provided to the Customer without additional charge. A reasonable number of additional copies including subsequent additions and corrections will also be supplied in the future. Two copies of the Maintenance Manual will be provided on installation.

Neither this agreement nor any of Customer's rights hereunder shall be assignable except with the written consent of DEC, and the terms and conditions hereof shall bind any permitted successors and assigns of the Customer. If DEC assigns the rents reserved herein, or all or any of its other rights hereunder, the rights of its assignee shall be independent of any claim of the Customer against DEC; the Customer on receiving notice of any such assignment shall abide thereby and make payment as may therein be directed.

Either party may terminate this agreement for failure of the other party to comply with any of its terms and conditions.

This agreement shall be governed by the laws of the Commonwealth of Massachusetts. This constitutes the entire agreement between the Customer and DEC with respect to the lease and the purchase and sale of the equipment and no representation or statement not contained in this agreement shall be binding upon DEC as a warranty or otherwise. The foregoing terms and conditions shall prevail notwithstanding any variance with the terms and conditions of any prior agreement

between DEC and the Customer in respect of the equipment.

Customer

By _____
(Signature)

Date _____

Accepted by:

DIGITAL EQUIPMENT CORPORATION

By _____

Date _____

EXHIBIT A

Quantity	Description	Purchase Price	Monthly Rental Charge
1	Type 166 Arithmetic Processor including monitor typewriter, high speed paper tape reader	\$155,100	\$5,170.00
3	Type 163C Core Memories (12% Discount) includes two memory bus interfaces for each memory	\$339,768	\$12,870.00
1	Type 162 Fast Memory	\$ 30,000	\$ 1,000.000
2	Type 136 Data Control	\$ 20,000	\$ 666.666
1	Type 516/521 Magnetic Tape Control	\$ 18,000	\$ 600.000
2	Type 570 Magnetic Tape Transport	\$ 60,800	\$ 2,026.666
1	Type 646 Line Printer	\$ 30,000	\$ 1,000.000
1	Type 461 Card Reader	\$ 16,500	\$ 550.000
1	Type 551 DEctape Control	\$ 14,000	\$ 466.666
1	Type 555 DEctape Transport	\$ 7,400	\$ 246.666
1	Type 167 I. O. Processor	\$ 22,000	\$ 733.333
1	Type 236 Drum Control	\$ 13,000	\$ 433.333
1	Type 237 Magnetic Drum	\$ 75,000	\$ 2,500.000
1	Type 390 Memory Cycle Counter	\$ 4,700	\$ 156.666
1	Type 630 Data Communications System	\$ 25,714	\$ 857.133
		<hr/>	<hr/>
		\$831,982	\$29,277.129
		<hr/> <hr/>	<hr/> <hr/>

GUARANTEE

December , 1964

Dear Sirs:

This guarantee is given to you by Digital Equipment Corporation ("DEC") as an inducement for and in consideration of your entering into a certain Loan Agreement of even date herewith (the "Loan Agreement") by and between you and Charles W. Adams Associates, Inc. ("Adams"), the form of which you have delivered to DEC. DEC has agreed to sell to Adams certain equipment and Adams is planning to pay over to DEC the entire proceeds of the notes issued pursuant to the Loan Agreement in partial payment of the purchase price of said equipment.

On the terms and subject to the provisions set forth herein DEC hereby guarantees the payment of all amounts of principal which become due and payable to you from time to time by Adams by the terms of any and all notes issued by Adams pursuant to and in accordance with the Loan Agreement. In no event shall DEC's

obligations hereunder require DEC (1) to pay you more than the principal sum of \$ _____ or (2) to pay you any amount in respect of interest on the notes issued pursuant to the Loan Agreement.

DEC hereby waives notice of your acceptance of this guarantee.

In order to hold DEC liable hereunder there shall be no obligation on your part to resort at any time for payment of any of the notes to Adams or any other person, firm or corporation, their property or estate. Without limiting the foregoing, DEC waives presentment, demand, protest, and notice of protest and dishonor.

DEC guarantees that any amount which Adams is obligated to pay under the terms of any of the notes will be paid in accordance with the terms thereof, regardless of any law, regulation or decree now or hereafter in effect which might in any manner affect any of such terms.

Any amount which becomes due to you under or by reason of this guarantee is expressly subordinated in right of payment to the prior payment in full of all Senior Indebtedness, as hereinafter defined, of DEC. Senior Indebtedness shall mean the principal of and interest on (a) all indebtedness of DEC, now outstanding or hereafter existing, for money borrowed by DEC from any bank

or trust company, evidenced by notes maturing less than one year from their respective dates of issue, and (b) all renewals and extensions of any such indebtedness; unless by the terms of the note evidencing such indebtedness it is provided that such indebtedness is not superior in right of payment to any amount which becomes due under or by reason of this guarantee. Nothing contained in this paragraph shall prevent or excuse DEC from making punctual payment of all amounts which become due under or by reason of this guarantee except (1) during the pendency of any dissolution, winding up, liquidation or reorganization of DEC and (2) in the event and during the continuation of any default under any instrument constituting Senior Indebtedness or pursuant to which any Senior Indebtedness is issued, and continuing beyond the period of grace, therefor, if any, specified in such instrument.

To the extent that you call upon DEC to honor this guarantee, and DEC does so honor, you will transfer, without recourse, to DEC any and all notes (or portion thereof) held by you relating to the principal amounts paid you by DEC. DEC will not be obligated to pay you any accrued but unpaid interest on any of such notes.

You will advise DEC with respect to (1) the fact and amount of all loans made by you pursuant to the Loan Agreement and (2) the fact and amount of all repayments of principal to you by Adams.

You will deliver to DEC an executed copy and five conformed copies of the Loan Agreement.

You will deliver to DEC a conformed copy of each note executed by Adams pursuant to the Loan Agreement.

You will not make any change or effect any amendment to the Loan Agreement without the written consent of DEC.

You will not make any adjustment or compromise with respect to the Loan Agreement or any of the notes issued pursuant thereto without the written consent of DEC.

You will notify DEC of any default or event of default under the Loan Agreement or notes of which you have any knowledge.

Your obligation to communicate with DEC is satisfied by mailing the item first class mail, postage prepaid, to Digital Equipment Corporation, Attention: Mr. Harlan Anderson, Treasurer, 146 Main Street, Maynard, Massachusetts.

None of the terms or provisions of this guarantee may be waived, altered, modified or amended except in writing and then only to the extent therein expressly set forth.

This guarantee shall be binding upon DEC, its successors and assigns, and shall inure to the benefit of, and be enforceable

by you, your successors and assigns.

IN WITNESS WHEREOF, this guarantee has been duly executed
this day of December, 1964, at Maynard, Massachusetts.

Digital Equipment Corporation

By _____
Vice President

Attest:

Assistant Secretary

(Corporate Seal)

Master

ESCROW AGREEMENT

This Escrow Agreement made this _____ day of _____,
_____ by Charles W. Adams ("Adams"), Digital Equipment Corporation
("DEC"), and _____ Bank, ("Escrow Agent"), witnesseth:

WHEREAS, DEC is prepared to guarantee certain obligations
of Charles W. Adams Associates, Inc. ("Associates") only upon
receiving certain assurances from Adams, and

WHEREAS, Adams, an officer and stockholder of Associates,
is prepared to give DEC such assurances and to give DEC security
for the performance of his obligations.

NOW, THEREFORE, in consideration of the mutual covenants here-
in contained, it is mutually agreed as follows:

1. DEC will execute and deliver to Morgan Guaranty Trust
Company and C.I.T. Financial Corporation its guarantee of certain
obligations of Associates in the form heretofore delivered to
Adams.

2. Adams hereby places with the Escrow Agent _____ shares
of common stock of Associates, endorsed in blank ("property")
being all of the common stock of Associates owned by Adams, to
be held by the Escrow Agent in escrow in accordance with the

terms and conditions herein.

3. If at any time hereafter Adams shall (1) devote more than 5 percent of his working time to the interests of or for the benefit of any person, firm or corporation other than Associates or any wholly-owned subsidiary of Associates or (2) fail to devote substantially all his working time to the interest of Adams and its subsidiaries to the extent his health permits, then the Escrow Agent shall deliver the property to DEC.

4. The fee and any expenses of the Escrow Agent reasonably incurred in connection with this Escrow Agreement shall be paid by Adams.

5. The Escrow Agreement will terminate and the Escrow Agent will deliver the property to Adams (unless previously delivered to DEC pursuant to Section 3 hereof) on the earliest of (a) June 30, 1967, or (b) the date on which (i) DEC has no obligations under the guarantees delivered or to be delivered to Morgan Guaranty Trust Company and (ii) Associates has satisfied all of its obligations to DEC arising out of or in connection with a Sales Agreement dated _____, _____ and the Security Agreement referred to therein.

and C.I.T.

IN WITNESS WHEREOF, the parties hereto have set their hands on the date written above.

Charles W. Adams

Digital Equipment Corporation

By _____

_____ Bank

By _____



INTEROFFICE MEMORANDUM

COMPANY CONFIDENTIAL

DATE April 13, 1965

SUBJECT Adams PDP-6

TO DEC Board of Directors

FROM Harlan E. Anderson

At the present time, a rental contract exists between DEC and Charles Adams Associates, Inc. for a PDP-6 computer. In November 1964, there was a detailed investigation of the possibility of this PDP-6 being sold to Adams with a guarantee of a bank loan to Adams by DEC. No action was taken.

This subject is being reopened at this time in the interest of aiding DEC cash flow and profits for the year ending 25 June 1965 and in the interest of aiding Adams cash flow and providing minimum total cost to Adams.

Original Loan

Source of Funds:	50% Morgan Guaranty Trust Company 50% CIT Financial Corporation
Duration of Loan:	30 months.
Duration of DEC Guarantee:	30 months.
Payment Plan:	No Down Payment.

Morgan

	12 months @	\$11,666.67
next	12 months @	23,333.20
next	month @	46,666.68
next	month @	23,333.20

Morgan interest was 5½% of the unpaid balance and is not included.

CIT

next	4 months @	\$46,666.00
Balance of		<u>\$303,000.00</u>

CIT interest was 10% of the unpaid balance and is not included.

Present Rental Contract

Source of Funds: DEC through its line of credit.
Minimum Duration of Contract: 12 months.
Payment Plan: 1/30 of Purchase Price per Month (\$33,333,33/mo.)
Equity: 75% of first 12 monthly payments. 50% of second 12 monthly payments.
12 month Total Payments: \$400,000.
Effect on DEC Profit for Fiscal 1965: About Breakeven.

New Loan Possibility

Source of Funds: Bank
Purchase Price: \$1,000,000 - 45,360 (Memory Discounts) = \$954,640.
Down Payment: (\$100,000 or \$200,000)
Interest: Assumed 6%
Loan Duration: 3 or 4 years.
Duration of DEC Guarantee: 3 or 4 years.

Assume 6 year life for depreciation and investment credit purposes.

	<u>Down Payment 100K</u>		<u>Down Payment 200K</u>		<u>Rental</u>
	<u>3 year</u>	<u>4 year</u>	<u>3 year</u>	<u>4 year</u>	
12 months cash	\$431,885	\$361,733	\$493,051	\$431,108	\$400,000
12 month tax reduction	<u>232,469</u>	<u>233,003</u>	<u>229,719</u>	<u>230,190</u>	<u>200,000</u>
NET	\$199,416	\$128,730	\$263,332	\$200,918	\$200,000
24 months cash	\$747,678	\$610,646	\$771,010	\$650,896	\$800,000
24 month tax reduction	<u>359,036</u>	<u>361,740</u>	<u>354,036</u>	<u>356,865</u>	<u>400,000</u>
NET	\$388,642	\$248,906	\$416,974	\$294,031	\$400,000

Harlan E. Anderson

HEA:ncs



KEYDATA CORPORATION

A DIVISION OF charles w. adams associates inc.

575 TECHNOLOGY SQUARE · CAMBRIDGE · MASSACHUSETTS 02139 ♦ (617) 491-6565

April 16, 1965

Mr. Harland Anderson
Digital Corporation
Maynard, Massachusetts

Dear Harland

Enclosed is the copy of the Michael Gold study you requested.

Sincerely

W. F. Emmons, Jr.
Executive Vice President

WFE, Jr.:mao
Enc.

*Michael Gold: MIT School of Management
March 65 "A Survey & Appraisal of Commercial Uses of Time Sharing"*

Equipment Lease with Option to Purchase

C
O
P
Y
Digital Equipment Corporation, 146 Main Street, Maynard, Massachusetts (DEC) agrees to lease to Charles W. Adams Associates, Inc., 142 The Great Road, Bedford, Massachusetts (hereinafter referred to as the Customer) a PDP-6 computing system consisting of the items of equipment listed on Exhibit A hereto, (hereinafter collectively called the equipment) on the terms hereinafter set forth.

This Equipment Lease with Option to Purchase supersedes an earlier agreement relating to the sale of a similar system. DEC and the Customer agree that their respective rights and obligations are set forth in their entirety in this Equipment Lease with Option to Purchase and any amendments hereto.

DEC agrees to provide the following software:

MACRO-6 Assembler
FORTRAN II Compiler
DDT-6 Program Debugging Aid
Editor Program

Delivery of all the equipment except the Type 270 Disc and related hardware and the Core Memory Parity Option will be made from Maynard on or before February 23, 1965, or five weeks after the date this agreement is signed whichever is later. Delivery of the Type 270 Disc and related hardware will be made from Maynard on or before April 1, 1965, except that if the disc is not delivered to DEC on or before February 1, 1965, the April 1, 1965 date shall be extended by an interval equal to the interval between February 1, 1965 and such delivery to DEC. The Core Memory Parity Option will be installed within one month after the equipment less the disc has been installed and has passed all acceptance tests.

The equipment will be located at 575 Technology Square, Cambridge, Massachusetts.

I. Terms and Conditions of Lease

Term of Lease

C
O
P
Y
This lease shall continue in effect for one year for all the equipment from the later of (a) the date the equipment including the Type 270 Disc is installed ready for use and has completed the acceptance tests, or (b) May 1, 1965. It may be terminated by the Customer, with respect to any item of equipment at the end of said year or at the end of any calendar month thereafter, provided written notice is received by DEC three months prior to the termination date.

Monthly Rental Charges

The monthly rental charges plus the special maintenance service fee for the equipment as specified in Exhibit A begin on the day following that on which all the equipment is installed, ready for use and has completed the acceptance tests. The total monthly charge for each month will be invoiced in advance on the first of the month and each such invoice will be payable in full within thirty days of the date of the invoice without discount, provided that the first invoice shall include the pre-acceptance service fee and if all the equipment is installed ready for use and has completed the acceptance tests before May 1, 1965, the first invoice will be dated May 1, 1965, will be payable May 31, 1965 and will include any rental charges for the time prior to May 1, 1965, as well as the pre-acceptance service fee.

There shall be added to the above monthly rental charges amounts equal to any taxes, however designated, levied or based on such charges or on this lease or on the equipment or their use, including state and local privilege or excise taxes based on gross revenue and any taxes or amounts in lieu thereof paid or payable by DEC in respect of the foregoing, exclusive, however, of taxes based on the net income of DEC.

Acceptance Tests

DEC will demonstrate to the satisfaction of the Customer's representative appointed by the Customer for this purpose that the equipment and the software function in accordance with the claimed performance as demonstrated by (1) successful completion of DEC's standard acceptance test procedures and programs set forth in Exhibit B hereto and (2) successful completion of the Customer's special test programs and procedures set forth in Exhibit C hereto.

The Customer will bear all costs of preparation and checking of the special test programs and procedures set forth in Exhibit C. In no event can the final testing of the system be delayed by nonavailability of such special programs.

The equipment shall not be deemed to be acceptable until all of the equipment is installed ready for use at 575 Technology Square, Cambridge, Massachusetts and has completed the acceptance tests.

All acceptance tests specified in Exhibit B and C, pertaining to both hardware and software, are expected to be performed with no detected error or abnormality of any sort

throughout the entire period of the individual test, except ones of an inconsequential nature which may, at the sole discretion of Customer, be overlooked.

Each of the extended tests of the magnetic drum and magnetic disc shall commence within fifteen minutes after power has first been applied to the system following a shutdown of not less than two hours and shall continue throughout the stated period without interruption. During the last hour of each test, Customer shall have the option of interrupting the main power to the system on as many as ten separate occasions at times and for time intervals determined by Customer.

The Customer may not use any of the equipment prior to the acceptance of all of the equipment except under the conditions of pilot operation described below.

Pilot Operation

In recognition of the importance to both DEC and Customer of a period of pilot operation in which Customer undertakes to offer substantially full service to a few selected subscribers of its on-line, real-time system, DEC will endeavor to put the entire installation, with the possible exception of the drum, disc file or other peripheral devices, into satisfactory operating condition at as early a date as is feasible. Customer and DEC may then agree to undertake a period of pilot operation during which time Customer agrees to pay for the availability of the equipment as outlined in Pre-acceptance Fee below and DEC agrees to carry out all further installation, maintenance and acceptance tests during the hours

between 6 p.m. and 8 a.m. and at such other times as Customer, acting in good faith, finds it possible to permit such installation, maintenance and testing, either by interrupting its on-line services or by providing programming to facilitate such operations concurrent with its on-line services. Items of equipment shall not be used in pilot operation until they have satisfactorily completed all appropriate acceptance tests and have been accepted by the Customer.

Prior to pilot operation, if Customer desires and DEC agrees to allow Customer to use the equipment already accepted for pre-pilot operation tests for a given day during the hours 7 a.m. to 10 p.m., Customer will pay the Pre-acceptance Fee of 1/60 of 1% of the retail price of the equipment used for that given period.

Pre-acceptance Fee

In the event of pilot operation, as described above, the Customer will pay DEC a pre-acceptance service fee based on the total list price of the items of equipment placed in pilot operation. The pre-acceptance service fee shall be equal to the product of (a) 1/60 of 1% of the retail price of the equipment involved and (b) the number of days from the date such pilot operation commences until the date all the equipment is installed, ready for use and has completed the acceptance test. As additional items of equipment become available, they may be included in the pilot operation with appropriate adjustments in the pre-acceptance service fee.

Supplies

All supplies used in conjunction with the equipment are to be provided by the Customer and shall meet DEC specifications.

Maintenance

DEC will install the equipment at no additional cost to the Customer, and will make every reasonable effort not to disrupt the pilot operations of any equipment previously installed. The Customer will supply suitable building space, power, lighting, and air conditioning for the equipment and give DEC staff free access to the equipment for installation and testing prior to acceptance.

DEC will keep the equipment in good working order and will make all necessary adjustments and repairs. In consideration of the fact that Customer intends to offer on-line, real-time data processing services during the hours between 7 a.m. and 10 p.m. on normal weekdays and 7 a.m. to 1 p.m. on Saturday, DEC agrees to perform all maintenance of a nonemergency nature (i.e., scheduled preventive maintenance and maintenance required to correct degeneration of performance of equipment items where such degeneration has not resulted in significant interference with normal on-line operation) during the hours outside of Customer's on-line service period and to have appropriate personnel on call and located within or in close proximity to the area known as Technology Square, Cambridge, Massachusetts between the hours of 7 a.m. and 10 p.m. Monday through Friday, and Customer agrees to pay a special maintenance service fee equal to 2-1/2% of the monthly rental charge. DEC will use its best efforts to

C
O
P
Y

perform preventive maintenance and routine equipment checks during the periods 6 a.m. to 7 a.m. and 10 p.m. to 12 p.m., Monday through Friday. DEC reserves the right to make adjustments in the special maintenance service fee after the first 12-month rental period. DEC shall give the Customer written notice at least 30 days in advance of such adjustment.

Recognizing the importance to the Customer of Customer's proposed on-line, real-time operation, DEC agrees to refund a portion of the monthly rental charge in the event that equipment malfunction significantly interferes with the Customer's ability to perform on-line, real-time operations. Such refund will be subject to the following terms and conditions:

1. "Down time" is defined as that time during which equipment malfunction makes it impossible for the Customer to provide on-line, real-time service, except that malfunctions that occur within three months after formal acceptance of the malfunctioning item shall not be considered down time for the purposes of this paragraph. During down time DEC shall exercise complete control of the Type 166 Arithmetic Processor.
2. "Working day" is defined as the period between 8 a.m. and 6 p.m., Mondays through Fridays (excluding holidays). For the purpose of calculating refunds, each calendar month is considered to contain 22 working days.
3. For every period of two or more consecutive working days during which the down time each day exceeds one-half of the working day (i.e. more than five

C
O
P
Y

hours out of the ten hours), DEC agrees to refund to Customer an amount equal to 1/22 of the monthly rental charge times the number of days involved.

DEC shall have complete and free access to the equipment. Charges for any repairs or replacements due to the negligence of the Customer will be borne by the Customer. Suitable electric current to operate electrically operated equipment and a suitable place of installation with all facilities as specified by DEC will be furnished by the Customer. The facilities already installed or explicitly proposed by Customer at 575 Technology Square have been examined by DEC and are suitable for its needs.

Insurance

DEC and its insurers, if any, shall relieve the Customer of all risk of loss of or damage to the equipment from the date this agreement is signed and during the term hereof, however occasioned.

Alterations and Attachments

Upon prior written authorization from DEC alterations in or attachments to the equipment may be made. If the alteration or attachment interferes with the normal and satisfactory operation or maintenance of the equipment in such a manner as to increase substantially the cost of maintenance thereof, or create a safety hazard, the Customer will, upon notice from DEC to that effect, promptly remove the alteration or attachment and restore the equipment to its normal condition.

Transportation and Traveling Expenses

C
O
P
Y

All transportation and rigging charges for the equipment, both from and to the DEC plant, are to be paid by the Customer. Packing cases for the equipment and a representative to supervise the packing and unpacking will be furnished by DEC without charge. The equipment covered by this agreement is not to be moved from the location stated on the first page hereof without the prior written consent of DEC which consent will not be unreasonably withheld. The Customer will furnish such labor as may be necessary to change location when the equipment is in the possession of the Customer.

Warranty

DEC warrants that the equipment when installed will be in good working order, and free of manufacturing, materials, and design defects. All equipment is supplied subject to these warranties, and DEC's obligation thereunder is limited to repair or replacement of any parts of the equipment when DEC determines that the equipment does not conform to these warranties.

The foregoing warranties are in lieu of all other warranties expressed or implied, and of all obligations or liabilities on the part of DEC for damages, including but not limited to consequential damages, arising out of or in connection with the use or performance of the equipment.

Miscellaneous

The equipment remains the personal property of DEC and may be removed by DEC at any time after the termination of this lease,

C
O
P
Y

except to the extent that the Customer elects to exercise the option to purchase provided below. The Customer shall not do, permit or suffer any act or thing whereby DEC's title or rights to the equipment may be encumbered or impaired. DEC shall have the right to mark or label the equipment adequately to evidence its ownership, such markings being adequate to meet legal requirements for establishing ownership but otherwise as inconspicuous as possible and of adequate dignity and decorum.

If the drum system is not installed, ready for use, and has not completed all acceptance tests by April 1, 1965, DEC will, at no cost to the Customer lend to the Customer a Type 161 memory module for a period of six months commencing 1 April 1965.

II. Terms and Conditions of Option to Purchase

DEC grants to the Customer a nonassignable option to purchase from DEC on the following terms and conditions all of the equipment described on EXhibit A hereto.

The Customer may exercise the option to purchase all of the equipment to take effect on or after installation by written notice to DEC referring to this equipment lease.

The option for the equipment is valid only as long as the equipment continues under the lease arrangement established in Part I of this equipment lease until the effective date of purchase hereunder.

If the option is exercised, it must be exercised for all of the equipment. If the Customer elects to exercise the option to purchase, the purchase will be subject to the terms and conditions of purchase which follow.

III. Terms and Condition of Purchase

Effective Date of Purchase

A purchase shall be effective on or after installation on the day following receipt by DEC of the Customer's written notice of exercise of the option. Equipment purchased will be discontinued under the lease arrangement established in Part I of this agreement as of the day immediately preceding such effective date. The Customer shall pay all charges with respect to such equipment due under the lease arrangement.

Price

The price for the equipment shall be the purchase price set forth in Exhibit A hereto less a credit equal to the sum of (1) 75 per cent of the total rental charges (not including Special Maintenance Service Fees) paid by the Customer under this equipment lease in respect of the first twelve months hereof and (2) 50 per cent of the total rental charges (not including Special Maintenance Service Fees) paid by the Customer in respect of equipment for the 24-month period following the first twelve-month period specified in Clause 1. No credit is available in respect of rental charges paid after 36 months.

C
O
P
Y

There shall be added to the above price an amount equal to any taxes, however designated, levied or based on such price or on this agreement or the equipment, including state and local privilege or excise taxes based on gross revenue, and any taxes or amounts in lieu thereof paid or payable by DEC in respect of the foregoing, exclusive, however, of taxes based on net income.

Terms of Payment

Payment for the equipment shall be made in full within thirty days after the date of invoice. The invoice shall be dated as of the effective date of purchase.

Title

Title to the equipment is to remain in DEC until the full purchase price is paid. Failure to pay the purchase price of the equipment when due shall give DEC the right, without liability, to repossess such equipment, with or without notice, and to avail itself of any legal remedy.

Risk of Loss

During the period the equipment is in transit or in possession of the Customer up to the effective purchase date DEC and its insurers, if any, relieve the Customer of all risk of loss of or damage to the equipment. After the effective date of purchase, the risk of loss or damage shall be on the Customer.

Warranty

DEC warrants the equipment purchased to be in good working order on the effective date of purchase.

DEC will keep any item of equipment which has been installed for less than one hundred eighty days under the lease arrangement established in Part I of this agreement in good working order through the one hundred eightieth day after installation. At the Customer's request during the warranty period, DEC will make all necessary adjustments, repairs and parts replacements. All replaced parts will be come the property of DEC on an exchange basis. This warranty will not apply if such adjustment, repair or parts replacement is required because of accident, neglect, misuse, failure of electric power, of air conditioning, or of humidity control or causes other than ordinary use, caused by someone other than DEC. Neither shall it apply to any equipment modified without the approval of DEC or to damage caused by transportation by someone other than DEC.

DEC shall have full and free access to the equipment to perform this service. DEC shall not be responsible for failure to render service due to causes beyond its control. This warranty shall apply only to the original Customer. DEC shall not be required to adjust or repair any piece of equipment or part if alterations or attachments interfere with normal safe access.

The foregoing warranties are in lieu of all other warranties expressed or implied, and of all obligations or liabilities on the part of DEC for damages, including but not limited to consequential damages, arising out of or in connection with the use or performance of the equipment.

C
O
P
Y

Maintenance Service and Parts

DEC will, if requested, provide the Customer with maintenance service for the equipment after the exercise of the option to purchase, and repair or replace parts, as long as they are generally available, on the basis of DEC's established prices and terms prevailing at the time.

Patent

DEC shall indemnify the Customer against liability, including costs arising out of claims that any of the items of equipment or any parts thereof covered by this agreement infringe any United States Letters Patent. The foregoing indemnity shall not apply unless DEC shall have been informed as soon as practicable by the Customer of the suit or action alleging such infringement, and shall have been given opportunity to participate in the defense thereof.

IV. Additional Products

1. DEC offers the Customer two-month delivery on a second Type 630 Data Communication System identical to the Type 630 Data Communication System included in this agreement. This offer is good for twelve months from date of this agreement. DEC's standard prices, terms and conditions in effect at the time of the order shall apply to this equipment.

2. DEC offers the Customer six-month delivery on a second magnetic drum system identical to the magnetic drum system incorporated into the system. This offer is good for twelve

months from date of this agreement. DEC's standard prices, terms and conditions in effect at the time of the order shall apply to this equipment.

V. General

DEC will provide at no additional cost, programmer training for five personnel of the Customer. These programming courses will be conducted at the DEC factory in Maynard at a time mutually agreed upon and will be oriented towards the use of MACRO-6, PDP-6 FORTRAN, DDT, and other software. In addition, five personnel of the Customer may attend maintenance training classes at the DEC factory without charge.

Twenty copies of the manuals describing the software will be provided to the Customer without additional charge. A reasonable number of additional copies including subsequent additions and corrections will also be supplied in the future. Two copies of the Maintenance Manual will be provided on installation.

Neither this agreement nor any of Customer's rights hereunder shall be assignable except with the written consent of DEC, and the terms and conditions hereof shall bind any permitted successors and assigns of the Customer. If DEC assigns the rents reserved herein, or all or any of its other rights hereunder, the rights of its assignee shall be independent of any claim of the Customer against DEC; the Customer on receiving notice of any such assignment shall abide thereby and make payment as may therein be directed.

C
O
P
Y

Either party may terminate this agreement for failure of the other party to comply with any of its terms and conditions.

This agreement shall be governed by the laws of the Commonwealth of Massachusetts. This constitutes the entire agreement between the Customer and DEC with respect to the lease and the purchase and sale of the equipment and no representation or statement not contained in this agreement shall be binding upon DEC as a warranty or otherwise. The foregoing terms and conditions shall prevail notwithstanding any variance with the terms and conditions of any prior agreement between DEC and the Customer in respect of the equipment.

CHARLES W. ADAMS ASSOCIATES, INC.

By _____
(Signature)

Date _____

Accepted by:

DIGITAL EQUIPMENT CORPORATION

By _____

Date _____

C
O
P
Y

EXHIBIT A

Quantity	Description	Purchase * Price	Monthly Rental * Charge
1	Type 166 Arithmetic Processor including monitor typewriter, high speed paper tape reader	\$155,100	\$5,170.000
3	Type 163C Core Memories (12% Discount) includes two memory bus interfaces for each memory	\$339,768	\$12,870.000
1	Type 162 Fast Memory	\$ 30,000	\$ 1,000.000
2	Type 136 Data Control	\$ 20,000	\$ 666.666
1	Type 516/521 Magnetic Tape Control	\$ 18,000	\$ 600.000
2	Type 570 Magnetic Tape Transport	\$ 60,800	\$ 2,026.666
1	Type 646 Line Printer	\$ 30,000	\$ 1,000.000
1	Type 461 Card Reader	\$ 16,500	\$ 550.000
1	Type 551 DEctape Control	\$ 14,000	\$ 466.666
1	Type 555 DEctape Transport	\$ 7,400	\$ 246.666
1	Type 167 I. O. Processor	\$ 22,000	\$ 733.333
1	Type 236 Drum Control	\$ 13,000	\$ 433.333
1	Type 237 Magnetic Drum	\$ 75,000	\$ 2,500.000
1	Type 390 Memory Cycle Counter	\$ 4,700	\$ 156.666
1	Type 630 Data Communications System	\$ 27,914	\$ 930.466
1	Type 270 Disc	\$140,000	\$ 4,666.666
3	Core Memory Parity Check	\$ 15,840	\$ 600.000
		<u>\$990,022</u>	<u>\$34,617.130</u>

. Special Maintenance Service Fee

\$ 865.43

Total Monthly charge

\$35,482.56

* Purchase prices include any applicable discounts.

Monthly rental charges are based on non-discounted retail prices.

Bill Beckman
8:15

12/14/67

Dick Testa

(Report on meeting with ADAMS lawyer)

→ ① Requested.
Extension of lease options till Jan 15, 1964
Offered Dec. 18. —

→ ② Acceptance Testa — Holding up agreement
[10¹² drum]

OK → ③ Parity Option is desired — (It was left out of list)

④ No future constraints on their activity.

⑤ Guarantee does not hold if they buy IBM for second center program.

Adams does not like any of these.

⑥ Total indebtedness & rental payments,
working capital.

2nd Call

⑦ Security Interest in Receivables to the extent of interest due only
(150K Receivables)

⑧ Then go the lease route.

Call Adams directly | Extend lease option till Friday

- Chas. Adams -

Priority

April 23,

Assembler Trouble because of Time Sharing System.

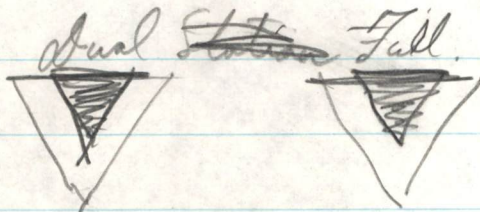
DEC Saturday. time not used ???

NOT TRUE ↗

→ 1. Do not want to exhibit as such! ←

2. Would be willing to have a station at! ←

→ New England Bell.



~~2070~~
5
~~3090~~

Adams file

dec

INTEROFFICE
MEMORANDUM

DATE November 10, 1964

SUBJECT Meeting with Adams Associates

TO File

FROM Harlan Anderson

cc: Gordon Bell
Bob Beckman
Stan Olsen

Today Bob Beckman and I visited Adams Associates and met with Charlie Adams, Paul Slattery, and Al Rousseau to discuss a number of detail problem areas. This memo is merely a tabulation of these to make sure that we do not forget to take the agreed-upon action.

1. It was decided that within the next two weeks we should have a meeting between our PDP-6 programming people (probably Gordon Bell and Dit Morse) and Adams' representatives to explore the possibility of their software package operating as part of our time sharing system or to what degree program compatibility is feasible. Adams feels that we are basically trying to accomplish different objectives (which is true), and therefore the likelihood that we can be compatible is very low. I have two comments on this: first, we have not provided them sufficient detail in the past to ascertain that this is true; second, the advantages and desirability of our software activities being compatible are so great that it is worth some effort for them and us.
2. We promised to give them the card to macro program by the 16th of November. Adams felt that our presently planned performance for this, where we treated cards like paper tape using delimiters rather than using field lay out of the card, was a very unattractive design feature. For example, it makes it impossible to list a program on a 407 printer. Later conversation with Gordon Bell on this point led me to understand that this is not our intention and that we are presently doing something to fix this.
3. We would provide information to Adams by Tuesday concerning the price, performance, and availability of a Data Products discfile as a DEC-provided item. The situation on the FASTRAN is that they are apparently satisfied with the reliability information obtained of late from Lincoln Lab but are still reluctant to have a split contractual responsibility for their overall system and they would like to start with a unit having slightly less capacity than the FASTRAN in order to minimize the initial capital investment even if the cost per bit is slightly higher.
4. We discussed briefly the status of the drum system and I think a more detailed report to them would be quite appropriate.

5. We need to provide them with performance specs for microtape, IBM compatible tape and the drum. This is presently in the works with Bob Beckman and Paul Slattery but needs to be pinned down in writing. They like the documentation that they now have on the 630 full duplex communication system and they were pleased with the Type 57A documentation for programming that they obtained originally with the PDP-4. They used these two documents as the examples of the kinds of information that they need on the Type 570 Tape Drive and Type 516 Tape Control. In later discussions with Steve Lambert I understand that such a document is now at the stage where it is ready to be printed.
6. We promised to try and obtain computer time for them partially during the day. This would be beneficial because more DEC people would be around and would be able to help them if they have difficulties in using the machine. Also, they would be willing to take some evening time. I believe, that with careful planning, this would be possible and would represent an equitable arrangement. There is some obvious lack of sufficient communication with their people about what we are doing and day time for part of their machine should be helpful on this.
7. We promised to arrange for a demonstration of our EDITOR program in order to encourage them to use it from teletypewriters to microtape instead of punched cards. They seemed quite interested in it and said that they would be interested in seeing this demonstration in the next day or two.
8. Add the names of Al Rousseau and Paul Slattery to our internal distribution list for programming memoranda. They were cautioned that many of these represented interim things or proposed things, or in other ways, things that were uncertain but it still seemed worthwhile to do.

Andy

HEA.ncs

charles w. **adams associates** inc.

575 TECHNOLOGY SQUARE · CAMBRIDGE · MASSACHUSETTS 02139 ◊ (617) 491-6555

July 30, 1965

Digital Equipment Corporation
146 Main Street
Maynard, Massachusetts

Attention: Mr. Harlan E. Anderson

Re: Agreement dated January 15, 1965

Gentlemen

Pursuant to the terms of the agreement between us dated January 15, 1965 (the "Agreement"), we are writing to notify you that we hereby terminate the Agreement for your failure to comply with the terms and conditions thereof, including, among others, your failure to make timely delivery of equipment and software, the failure of the equipment to meet specifications, and repeated, protracted delays in bringing equipment up to acceptance test standards.

Kindly communicate with the undersigned to arrange for the prompt and orderly removal of the equipment from our premises.

Very truly yours

CHARLES W. ADAMS ASSOCIATES, INC.

By: *Charles W Adams*

Charles W. Adams

MEMORANDUM

TO: H. Anderson
FROM: R. Testa
SUBJECT: Forms of Equity Capital

During the recent Adams negotiations, you suggested that it may be necessary for Digital to obtain additional equity financing. Without attempting to recommend a particular financing vehicle, this memorandum will serve to point out potential methods.

1. Additional Common Stock - Sale of additional common stock is the most common method used to obtain additional equity money.
2. Long-Term Debt - The use of unsecured long-term debt will usually require lengthy restrictions on corporate action.
3. Convertible Subordinated Debt - Many electronics companies have found the use of convertible subordinated debt to be advantageous. Underwriting is generally required. It would probably be difficult to obtain favorable terms, i.e., interest and conversion rate unless the Company's stock is fairly widely held.
4. Preferred Stock - Preferred Stock is not generally recommended for industrial companies.

The method of sale would however be extremely important. Some of the methods which might be employed are:

A - Underwriting - A selected underwriter or underwriters would arrange for the sale. This requires price negotiation between the Company and the underwriters.

B - Rights Offering - A rights offering would allow the Company to control the price. If "stand-by underwriting" is used, then the stand-by underwriters will negotiate with respect to the price. It is conceivable to limit the rights offering to (i) all present shareholders, (ii) ARD only, (iii) ARD stockholders only, or (iv) ARD stockholders and DEC stockholders other than ARD.

C - Private Placement - The private placement for Adams Associates was arranged without untoward difficulty. Generally, however, the buyer will ask for representation on the Board of Directors.

digital

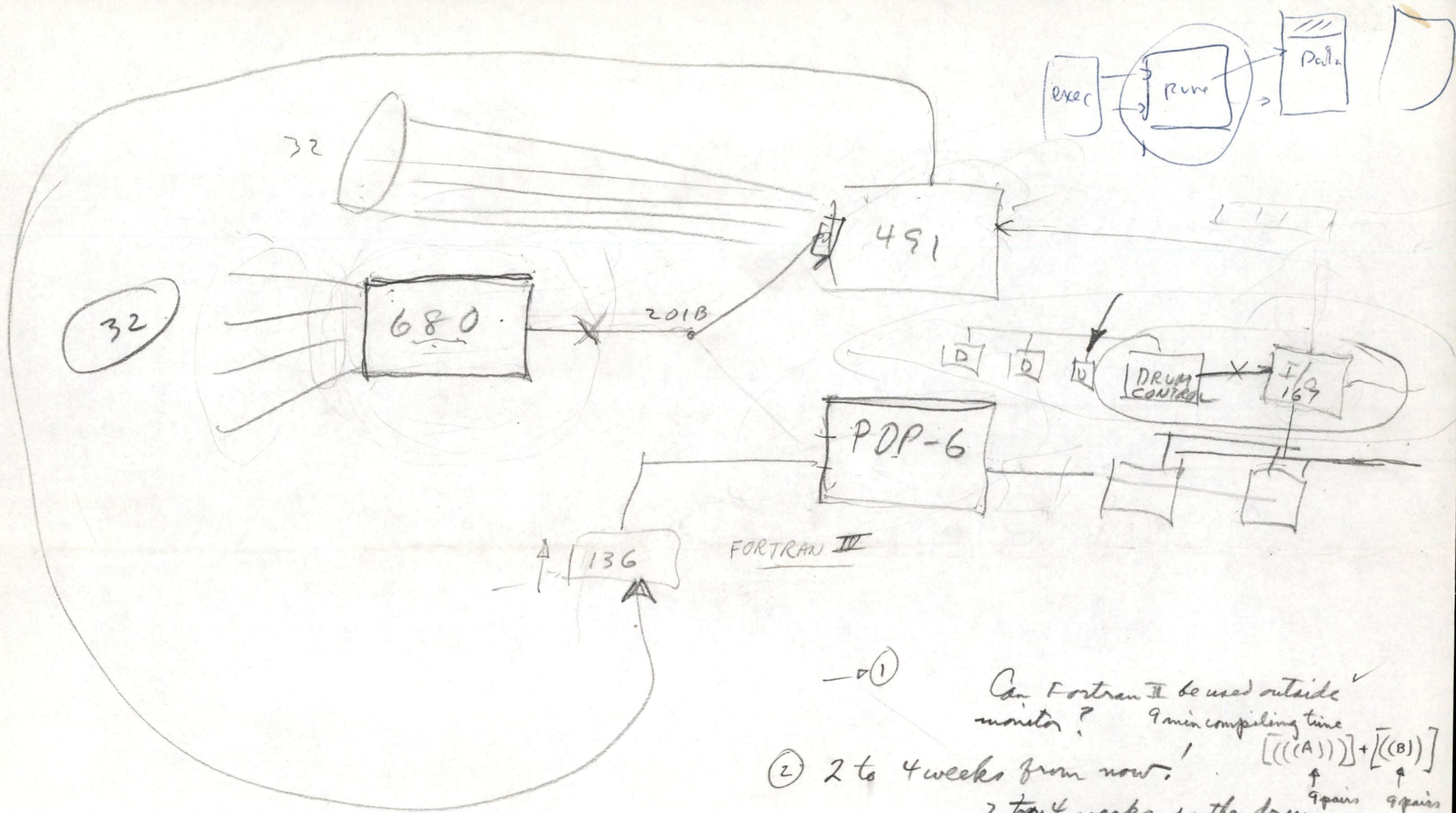
Char. Adams

2 PM

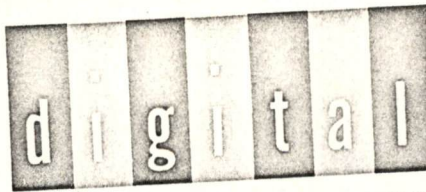


Fred Rubenstein

- Board
- Dick Jemison (not there)
 - Peggy Shuller -
 - Jesse Cousins -
 - Jerry Pistilnik - N.Y. Investor -
 - George Sternlieb - (T)
 - Jack Gilmore



- ① Can Fortran II be used outside monitor? 9 min compiling time
- ② 2 to 4 weeks from now! $[\overline{((A))}] + [\overline{(B)}]$
 2 to 4 weeks for the drums to be resurfaced.
↑ 9 pairs ↑ 9 pairs



equipment corporation

MAYNARD, MASSACHUSETTS
TWinoaks 7-8822 TWX MAYN 816

August 2, 1965

This statement authorizes Mr. Robert Beckman and/or Mr. Richard Testa to represent Digital Equipment Corporation until 18 August 1965 in preparation of a detailed amendment to an existing agreement between Charles W. Adams Associates, Inc. and Digital Equipment Corporation - Equipment Lease with Option to Purchase dated 15 January 1965. This amendment to the lease to be consistent with the general principles outlined in my letter of 30 July 1965 to Mr. William Emmons, Jr. of Keydata Corporation.

A handwritten signature in cursive script that reads "Harlan E. Anderson". The signature is written in dark ink and is positioned above the typed name.

Harlan E. Anderson, Vice President
Digital Equipment Corporation

Keydata.

7/22/65

① UNIVAC 491

Business Operations

② PDP-6 - Main Frame + memory.

Drum.
DEC Tape

+ Direct Channel

Remove

630 ✓

disc.
C.R.

1 Tape or maybe 2

Line Printer

1 module of memory

CDC 3200

or

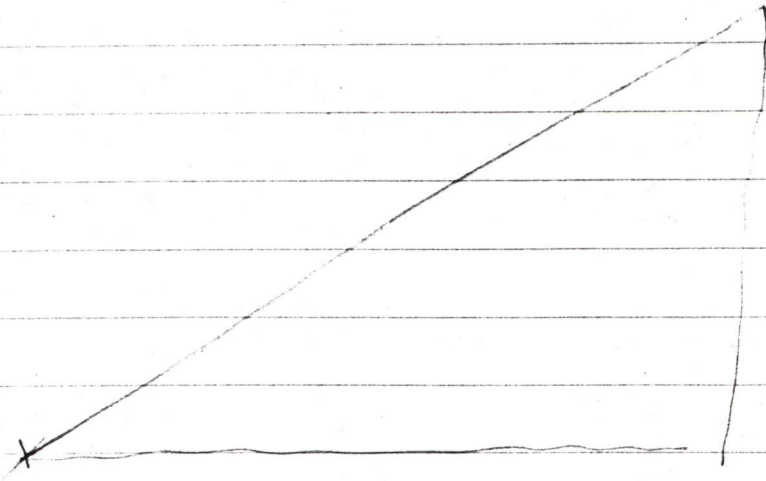
CDC 3200 - 491

Keydata.

- 0. Low production - min. number of options is large.
 - 1. Over committed Eng. work
 - 2. Inexperienced organizationally
 - 3. Application & Customer Critical
- } Quality.

~~Skimping~~

- ↙ #. Skimping
- a.) Lack of memory
 - b.) Late drum
 - c.)



File

July 30, 1965

Mr. William F. Emmons, Jr.
Executive Vice President
Keydata Corporation
575 Technology Square
Cambridge, Massachusetts 02139

Dear Mr. Emmons:

During our recent discussions, you suggested several possible variations to our lease agreement and requested our reaction to these. As you know, we have given a great deal of thought to these possibilities, including recent technical discussions with your people, and have arrived at the conclusions stated below. The following represents DEC's position in regard to the Keydata PDP-6 installation.

We are convinced that the system as originally conceived is capable of doing your job. The intensive effort we have been putting into the equipment in the last several weeks has, if anything, strengthened this conviction. We are continuing to concentrate on meeting our commitments under the existing lease contract. We expect the system to be operational in the very near future.

We are willing to modify the lease agreement in the following respects:

1. The monthly rental on the Arithmetic Processor and Core Memories will be reduced by 20%.
2. The monthly rental on the Drum System will be reduced by 50%.
3. The monthly rental on the entire system (as reduced above) will be reduced by 50% for the four month period following date of acceptance.
4. Acceptance with revised technical specifications (including present design specifications) as previously discussed must occur within six weeks.

Mr. William F. Emmons, Jr.

-2-

July 30, 1965

We feel it inappropriate to consider any additions to the configuration until after acceptance of the present equipment. When the system is operational and new items in which you are interested have been developed and evaluated, we will be happy to discuss such additions or substitutions.

One of your suggestions involved a revised configuration of the PDP-6 system. We will be happy to provide your suggested configuration, or one similar to it, within the limitations stated above that no new equipment should be added at this time.

We have carefully evaluated your suggestion that the PDP-6 be connected to a computer supplied by another manufacturer. After considering the problems involved in interfacing, maintenance, definition of proper operation, etc., we feel this is an unworkable situation.

If the conditions described above are acceptable to Charles W. Adams Associates, Inc. and DEC is so informed within the next thirty days, I will have our attorney prepare the detailed amendment to the lease.

In closing, I would like to restate our firm conviction that the PDP-6 can meet your requirements. The work to place the system into operation will proceed as rapidly as possible and, once in operation, the system will be supported with all appropriate resources at our disposal.

Sincerely,

Harlan E. Anderson, Vice President
Digital Equipment Corporation

HEA:11

File

July 30, 1965

Mr. William F. Emmons, Jr.
Executive Vice President
Keydata Corporation
575 Technology Square
Cambridge, Massachusetts 02139

Dear Mr. Emmons:

During our recent discussions, you suggested several possible variations to our lease agreement and requested our reaction to these. As you know, we have given a great deal of thought to these possibilities, including recent technical discussions with your people, and have arrived at the conclusions stated below. The following represents DEC's position in regard to the Keydata PDP-6 installation.

We are convinced that the system as originally conceived is capable of doing your job. The intensive effort we have been putting into the equipment in the last several weeks has, if anything, strengthened this conviction. We are continuing to concentrate on meeting our commitments under the existing lease contract. We expect the system to be operational in the very near future.

We are willing to modify the lease agreement in the following respects:

1. The monthly rental on the Arithmetic Processor and Core Memories will be reduced by 20%.
2. The monthly rental on the Drum System will be reduced by 50%.
3. The monthly rental on the entire system (as reduced above) will be reduced by 50% for the four month period following date of acceptance.
4. Acceptance with revised technical specifications (including present design specifications) as previously discussed must occur within six weeks.

July 30, 1965

We feel it inappropriate to consider any additions to the configuration until after acceptance of the present equipment. When the system is operational and new items in which you are interested have been developed and evaluated, we will be happy to discuss such additions or substitutions.

One of your suggestions involved a revised configuration of the PDP-6 system. We will be happy to provide your suggested configuration, or one similar to it, within the limitations stated above that no new equipment should be added at this time.

We have carefully evaluated your suggestion that the PDP-6 be connected to a computer supplied by another manufacturer. After considering the problems involved in interfacing, maintenance, definition of proper operation, etc., we feel this is an unworkable situation.

If the conditions described above are acceptable to Charles W. Adams Associates, Inc. and DEC is so informed within the next thirty days, I will have our attorney prepare the detailed amendment to the lease.

In closing, I would like to restate our firm conviction that the PDP-6 can meet your requirements. The work to place the system into operation will proceed as rapidly as possible and, once in operation, the system will be supported with all appropriate resources at our disposal.

Sincerely,

Harlan E. Anderson, Vice President
Digital Equipment Corporation

HEA:11



KEYDATA CORPORATION
A DIVISION OF charles w. adams associates inc.
575 TECHNOLOGY SQUARE · CAMBRIDGE · MASSACHUSETTS 02139 ♦ (617) 491-6565

June 8, 1965

Digital Equipment Corporation
146 Main Street
Maynard, Massachusetts

Attention: Mr. Harlan E. Anderson

Re: PDP-6 Computer Lease Agreement

Dear Mr. Anderson

On March 8, 1965 we wrote to you listing a number of serious problems caused by the delay in your delivery to us and by certain shortcomings in performance of several items of hardware and software in the PDP-6 System covered in our lease agreement.

As of this date we still have not received the drum (scheduled for delivery February 23, 1965). The parity option still has not been installed. If it had been installed as scheduled, it could have helped facilitate the detection and correction of problems which arose when we attempted to check out our programs using equipment of yours where in many cases mistakes were not easily diagnosed as being attributable to one or the other.

Among other problems, the central processor appears to be performing very much below the execution time specifications given for it in your book of specifications F-65 dated February, 1964, with the effect of proportionally reducing the capability of the entire system for our intended applications. We further understand that you now also contemplate replacing the execution time specifications of the central processor by ones substantially below those which originally induced us to enter into the Agreement. Any such changes would of course be a change in the terms of the Agreement and would require our consent.

You are aware of serious difficulties that these conditions continue to create for us, and of the substantial additional expenses and loss of revenue to us which are the unavoidable result.

We appreciate that you have expended time and effort in an attempt to meet the scheduled delivery and acceptance date contemplated in the agreement between us; nevertheless, the delivery of equipment has unfortunately varied materially from the schedule. Perhaps a thorough discussion of these items and your proposed remedies would be in order at this time. I shall await word from you.

Sincerely



Charles W. Adams

CWA: jlm

9522-988-208

charles w. **adams associates** inc.

575 TECHNOLOGY SQUARE · CAMBRIDGE · MASSACHUSETTS 02139 ♦ (617) 491-6555

March 8, 1965

Digital Equipment Corporation
146 Main Street
Maynard, Massachusetts

re: PDP-6 Computer Lease Agreement

Attention: Harlan E. Anderson

Dear Mr. Anderson

As you know, we were pleased to receive, last Friday, the first installment of the PDP-6 computer system we have agreed to lease from you. The drum system, one core bank, switchboard, and the disc system have not yet been delivered. While we appreciate the difficulties you encountered and the effort your people have expended during the past week or two, we are nevertheless extremely concerned that the February 23 delivery date in the lease agreement was not met.

You will recall that original delivery was scheduled for January 22, 1965, and during negotiations of the lease agreement this delivery was extended to February 23rd, except for the disc system for which April delivery was promised. In spite of the additional time thus provided, initial delivery was delayed for eleven days with the drum and switchboard yet to appear.

During our meeting on the afternoon of February 12, 1965, you and your associates indicated that there would be no problem in delivering both hardware and software on February 23rd, except for the disc system which is to be delivered to us on April 15th as previously agreed. At the February 12 meeting, we agreed to accept a delay in delivery of the drum system and one core bank until the 15th of March. On March 4, Mr. Beckman advised us that the drum system would not be delivered until March 29 at the earliest, a delay which we can only deplore.

In the area of computer software, both availability and reliability have consistently been far below our expectation. Even at this late date only a limited version of FORTRAN II is in our hands, and no plan has been announced to improve the situation.

As you know on-time delivery is an integral part of our lease agreement and is extremely important to us. These repeated unanticipated delays in the delivery of our equipment and software are preventing us from adhering to our implementation schedule and are causing substantial damage and dislocation.

Under the circumstances, I urge that you take whatever steps are necessary to install the switchboard and core bank, meet the agreed dates of March 15 for the drum system and April 15 for the disc system, and to insure that check-out and maintenance are up to your usual high standards. Additional delay either in delivery of the remainder of the equipment and software or in putting it into reliable operation will force us to vary further from our carefully formulated plans and cause additional irreparable damage.

Sincerely


Charles W. Adams

CWA/hcs