digital

#### DIGITAL EQUIPMENT CORPORATION

Russell A. Gullotti Vice President Digital Drive Merrimack, New Hampshire 03054-9501

March 30, 1994

Mr. Stan Beckelman President Boeing Information Services, Inc. 7990 Boeing Court Vienna, VA. 22183-7000

Dear Stan,

As always, it was a pleasure to see you again on Wednesday 3/23. I also enjoyed meeting Jimmy Smith, VP for the RCAS Program. As I mentioned, I continue to get positive feedback about Jimmy's team approach and leadership.

In summarizing our meeting, I understood that Boeing Information Services, Inc. intends to aggressively increase its marketshare in the Government community over the next 2-3 years. I can assure you that Digital intends to provide Boeing with the technologies and services necessary to retain and enhance both your current, as well as future programs. We are anxious to work closely with your team to deliver winning solutions to you and your customer(s).

After listening to your concerns regarding the Digital RCAS Program, the following actions were taken:

#### 1.Performance Issue:

- John Magnusson, Digital RCAS PM, communicated with RCAS Engineering management on Thursday, March 24,1994 to develop an Action Plan agreeable to Boeing and Digital. We began execution on March 25,1994. Daily progress is communicated to Boeing.

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#### 2. ALPHA Migration:

- Digital RCAS PMO received Boeing's letter of March 15,1994, expressing interest in jointly developing an Interface Control Document(IND). This document, once complete, will provide both companies the baseline from which to begin a migration to Digital's ALPHA technology. Communications are currently in process on this subject.

#### 3. RCAS PC Bid:

- Digital is in receipt of Boeing's PC RFI, dated March 21,1994. We are actively developing our response to this technical RFI. This is an exciting opportunity.

In short, I believe we are closely engaged with your team on each of these activities. I will receive bimonthly progress reports on these items.

As Digital's Executive Partner for the Boeing Company, I am committed to working with you and members of Boeing's executive team on a regular basis. I look forward to our next meeting.

Regards,

Russ Gullotti

President

Digital Americas

cc: Bob Tassone
John Magnusson
Jimmy Smith

## Account Manager Report - 1994 Customer Satisfaction Survey

Cherry

**Account Manager Report** 

for

**Boeing** 

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## WORLDWIDE CUSTOMER SATISFACTION SURVEY SUMMARY OF THE SATISFACTION LEVELS FOR THE MAJOR CATEGORIES 4th Quarter FY94

In August of 1993, Digital initiated a Worldwide Customer Satisfaction Survey. The intent was to obtain opinions from Decision Makers and Key Influencers in our largest accounts throughout the world. The goal of this survey is to evaluate Digital's ability to provide our customers with World Class products and services. This process is a continuous one and is on-going throughout FY95. By the close of fiscal year 1994, we reached 277 of our largest accounts and representatives from 162 of our Partner accounts.

During the fourth quarter of FY94, we surveyed 724 people, representing 78 accounts in the Americas, 42 accounts in Europe and 8 accounts from Asia/Pacific. In the Americas, the respondents represented 33% Decision Makers, 47% Key Influencers, 9% Users and 11% not specified. The Europeans consisted of 44% Decision Makers, 50% Key Influencers, 2% Users and 4% not specified. The survey participants from Asia/Pacific comprised 40% Decision Makers, 40% Key Influencers, 4% Users and 16% not specified.

The survey provided us with very important insights. First, we learned that Digital, generally, has strong support among our existing customer base. As in the previous three quarters, nearly sixty percent of the participants took the time to hand-write notes or comments on the survey. We have compiled them by categories and distributed them to Digital's Executive Management and Account Teams.

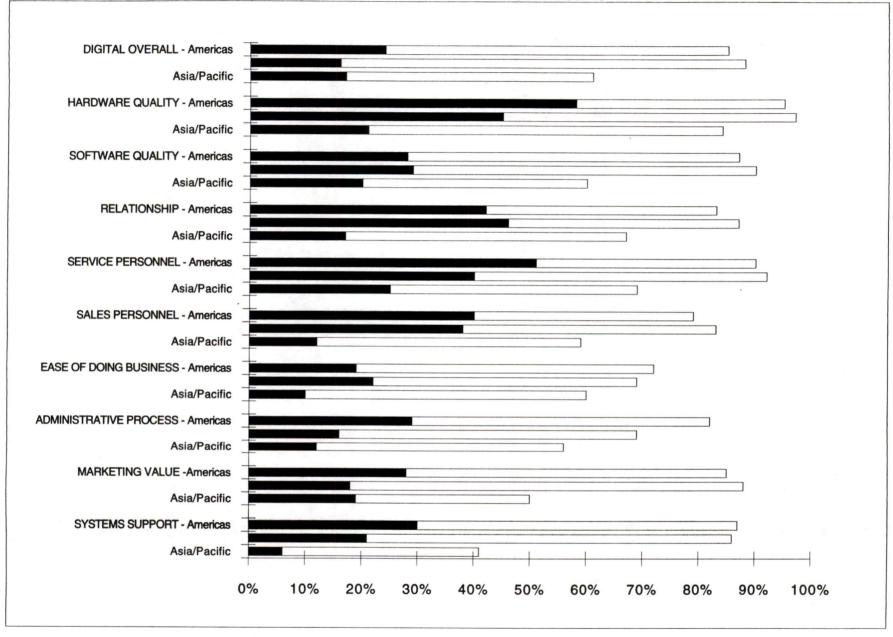
In the category of Overall Satisfaction, there was a 14% decrease from Q3 to Q4 in the Americas. Europe showed a 30% decrease. The Asia/Pacific region showed a decrease of 35% from Q3 to Q4, the first available data for comparison.

In the Americas Q4 showed no improvements in any areas. Within the European territory, only the areas of Software and Administrative Processes showed improved results. The Asia/Pacific territory results were down in all but two areas, Software and the Servicing of non-Digital equipment.

On the following page are the overall scores for the 10 major measurement categories for the survey. The rest of the pages in this report contain more detailed survey information for your account.

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#### 4th Quarter FY 94 - Area Results

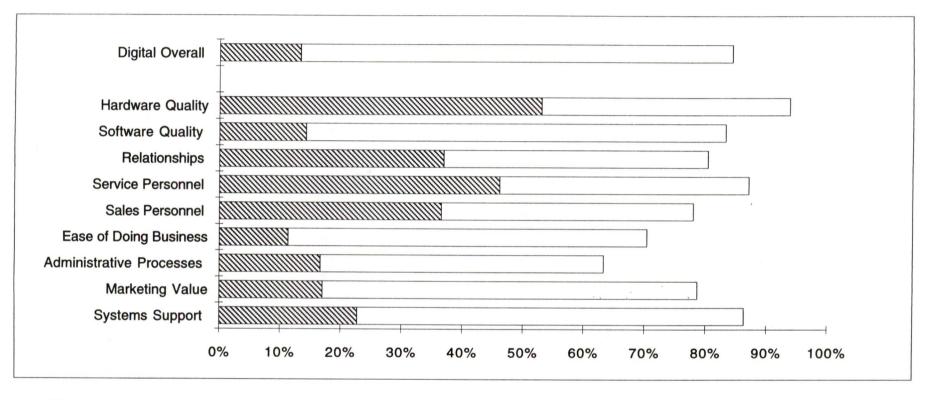


The bar graph above is a summary of the levels of Customer Satisfaction for the ten major satisfaction categories measured by Digital.

The solid, black bar is the percentage of respondents that are "Totally Satisfied". The white bar shows the additional percentage that are "Somewhat Satisfied" with the specific category. The sum of the two represent the percent of customers that are Totally Satisfied plus Somewhat Satisfied.

### **Boeing**

#### SUMMARY OF THE SATISFACTION LEVELS FOR THE MAJOR CATEGORIES



The bar graph above is a summary of the Customer Satisfaction measurements for the nine major satisfaction categories for your account. The cross-hatched bar is the percentage of respondents that are "Totally Satisfied" . The white bar shows the additional percentage that are "Somewhat Satisfied" with the specific category. The sum of the two represent the percent of customers that are Totally Satisfied plus Somewhat Satisfied.

Digital Overall, the category on the top of the chart shows the percentage of respondents that are Totally and Somewhat Satisfied with their general interactions with all aspects of Digital.

## **Boeing**

Total Number of Respondents 50

	OVERALL SATISFACTION							
QUESTIONS/STATEMENTS	Totally Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Totally Dissatisfied	Number Who Answered			
Based upon your recent experience, how satisfied are you with Digital overall?	13%	71%	16%.	0%	45			

	CUSTOMER IMPRESSIONS						
QUESTIONS/STATEMENTS	Fully Agree	Partially Agree	Partially Disagree	Fully Disagree	Number Who Answered		
2. I would lease or purchase products and services from Digital again.	57%	36%	2%	5%	42		
3. I would recommend Digital's products or services to an associate.	40%	45%	13%	2%	47		
4. When I think of information systems, products and services, I think of Digital first.	11%	32%	34%	23%	44		

	REQUESTS FOR MEETINGS						
QUESTIONS/STATEMENTS	Fully	Partially	Partially	Fully	Number Who		
	Agree	Agree	Disagree	Disagree	Answered		
5. I would like to have regular meetings with Digital to help me facilitate future planning.  6. I do not meet with Digital's Senior Management frequently enough.	24%	43%	24%	8%	37		
	22%	22%	27%	27%	40		

Boeing

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8/1/94

	HARDWARE							
QUESTIONS/STATEMENTS	Totally Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Totally Dissatisfied	Number Who Answered			
7. How satisfied are you with the quality of Digital's hardware?	53%	41%	6%	0%	49			
	Fully Agree	Partially Agree	Partially Disagree	Fully Disagree				
8. I can depend upon Digital's equipment to be reliable.	57%	36%	6%	0%	47			
9. Digital hardware warranties meet our needs.	29%	64%	7%	0%	42			
10. I consider Digital's equipment to be state-of-the-art.	19%	69%	10%	2%	48			

	SOFTWARE						
QUESTIONS/STATEMENTS	Totally Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Totally Dissatisfied	Number Who Answered		
11. How satisfied are you with the quality of software supplied by Digital?	14%	69%	17%	0%	42		
	Fully Agree	Partially Agree	Partially Disagree	Fully Disagree			
12. Digital does a good job in adapting their solutions to the local languages in non-English speaking countries.	0%	100%	0%	0%	1		
13. Digital's software is reliable.	27%	64%	7%	2%	45		
14. Digital's software is easy to use.	10%	71%	14%	5%	42		
15. Licensing software from Digital is difficult.	27%	37%	29%	7%	41		

	RELATIONSHIPS							
QUESTIONS/STATEMENTS	Totally Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Totally Dissatisfied	Number Who Answered			
16. Based upon your most recent experience, how satisfied are you with your relationship with Digital's personnel?	37%	43%	13%	7%	46			
17. How satisfied are you with the level of commitment and enthusiasm displayed by Digital's personnel?	30%	59%	7%	5%	44			
	Fully Agree	Partially Agree	Partially Disagree	Fully Disagree				
18. In the past, I have had very good relationships with Digital's personnel.	55%	38%	6%	0%	47			
19. Digital's actions demonstrate that they are interested in a long term relationship with us.	23%	49%	21%	7%	43			
20, I trust Digital as a business partner.	20%	60%	18%	2%	45			
21. I can count on Digital to keep their promises and commitments.	21%	53%	17%	9%	47			

	ADMINISTRATION				
QUESTIONS/STATEMENTS	Totally Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Totally Dissatisfied	Number Who Answered
22. How satisfied are you with Digital's delivery of equipment?	24%	61%	10%	5%	41
23. How satisfied are you with the ability of Digital's administrative processes to meet your company's administrative needs?	17%	47%	30%	7%	30
24. How satisfied are you with Digital's process of billing and invoicing?	22%	39%	28%	11%	18
	Fully Agree	Partially Agree	Partially Disagree	Fully Disagree	
25. Digital is flexible in how it responds to accepting and fulfilling orders.	14%	63%	20%	3%	35
26. I experience problems with orders and invoicing when they involve global purchases from Digital.	10%	38%	24%	29%	21
27. The time it takes from placing an order to the actual delivery of equipment is too long.	15%	47%	35%	3%	34

	MARKETING				à		
QUESTIONS/STATEMENTS	Totally Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Totally Dissatisfied	Number Who Answered		
28. How satisfied are you with the value that your company receives from its investment in Digital's products and services?	17%	62%	21%	0%	47		
29. How satisfied are you with Digital's ability to provide solutions to enhance your company's competitiveness?	6%	53%	34%	6%	32		
	Fully Agree	Partially Agree	Partially Disagree	Fully Disagree			
30. Solutions using Digital equipment and services are uniformly available worldwide.	12%	75%	12%	0%	8		
31. Digital effectively supports information industry standards.	19%	57%	24%	0%	37		
32. Digital communicates timely and thorough information about their products and services.	9%	41%	39%	11%	46		
33. Digital has a clear understanding of our business and industry needs.	7%	48%	36%	10%	42		
34. Digital leads the industry in open client server technology	3%	54%	37%	6%	35		
35. Digital is effective at providing me with third party solutions.	0%	30%	50%	20%	30		

		S	SUPPOR	Т	
QUESTIONS/STATEMENTS	Totally Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Totally Dissatisfied	Number Who Answered
36. How satisfied are you with the quality of systems support you receive from Digital?	23%	64%	9%	5%	44
	Fully Agree	Partially Agree	Partially Disagree	Fully Disagree	
37. The systems personnel in Digital are knowledgeable about Digital's hardware and software.	49%	46%	3%	3%	39
38. The documentation supplied by Digital is well written.	38%	55%	5%	2%	42
39. Digital understands our network needs and operations.	8%	47%	28%	17%	36
40. The training supplied by Digital is effective.	12%	68%	12%	9%	34
41. Digital's systems consultants are effective in defining and developing systems for our business needs.	20%	40%	27%	13%	15
42. Digital is effective at integrating our multi-vendor systems.	15%	56%	21%	9%	34

	SERVICE					
QUESTIONS/STATEMENTS	Totally Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Totally Dissatisfied	Number Who Answered	
43. How satisfied are you with Digital's installation of equipment?	56%	42%	3%	0%	36	
44. Based upon your most recent experience, how satisfied are you with Digital's Service Representatives?	46%	41%	10%	3%	39	
45. How satisfied are you with Digital's servicing of their equipment?	44%	49%	5%	2%	43	
46. How satisfied are you with Digital's ability to service non-Digital equipment?	25%	37%	25%	12%	24	
	Fully Agree	Partially Agree	Partially Disagree	Fully Disagree		
47. The Service Representatives respond effectively to our requests for service.	39%	41%	15%	5%	41	
48. Digital's Services Management is available whenever I need to meet with them to resolve problems.	24%	64%	9%	3%	33	
49. Maintenance for equipment and software is consistently available worldwide.	33%	58%	0%	8%	12	
50. Digital is flexible in delivering products and services worldwide.	14%	57%	24%	5%	21	

			SALES		
QUESTIONS/STATEMENTS	Totally Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Totally Dissatisfied	Number Who Answered
51. Based upon your most recent experience, how satisfied are you with Digital's Sales Representatives?	37%	41%	15%	7%	41
	Fully Agree	Partially Agree	Partially Disagree	Fully Disagree	
52. I have met the Digital Sales Account Manager assigned to our company.	48%	20%	13%	20%	46
53. My Digital Sales Representative is responsive to my requests.	44%	32%	15%	10%	41
54. The Digital Sales Representatives that I work with are knowledgeable about their products and services.	26%	58%	5%	11%	38
55. The turnover of Digital personnel assigned to us is too high.	21%	33%	21%	24%	42
56. My Digital Account Manager knows how to resolve issues that arise in support of my global needs.	14%	64%	11%	11%	36
57. Digital Sales Representatives propose appropriate products and solutions to fit my business needs.	2%	68%	17%	12%	41

	EASE OF DOING BUSINESS						
QUESTIONS/STATEMENTS	Fully Agree	Partially Agree	Partially Disagree	Fully Disagree	Number Who Answered		
58. Digital is an easy company to do business with.	11%	59%	20%	9%	44		
59. Whenever a problem arises, I know which Digital person I should contact.	34%	32%	28%	6%	47		
60. When I telephone Digital with a problem or request, I get connected efficiently to the correct individual.	16%	62%	18%	4%	45		
61. I have noticed a positive change in Digital's attitude during the last year.	6%	46%	31%	17%	35		

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### **APPENDIX**

- SECTION A A listing of the individuals in the Account who responded to the survey.
- SECTION B A listing of the respondents who would like to meet with Digital's management or who requested help in future planning of their information systems.
- SECTION C A list of the respondents who expressed dissatisfaction with the specific categories 1 -16. Note, Number 1 deals with the customer's impression of Digital. All others are specifically Customer Satisfaction questions.
- SECTION D A list of the individuals who were sent a survey, but did not respond.

#### A note on customer name collection

The customer names are gathered from four sources:

- 1. Directly from the Account Executive (primary source)
- 2. The Direct Marketing Database and the Computer Intelligence Database
- 3. Referrals from customers contacted in the above two sources
- 4. Customers that were sent surveys and forwarded to others within the company

Each potential respondent (Sources 1 & 2) is contacted by telephone prior to mailing any survey. Upon making contact and after a brief explanation of the process, they are invited to participate and to recommend any others within the organization who they feel would give objective feedback (Source 3).

#### NO ONE IS SENT A SURVEY WITHOUT THIS "VALIDATION" CALL.

In many cases, those who accept may delegate to others (Source #4). This accounts for the percentage of respondents who classify themselves as "Users". Also, we now find that one out of five people contacted refuse to take the survey for a multitude of reasons.

We attempt to contact every individual recommended by the Account Executive, but, if we do not obtain recommended key names from the Account Executives, it is not always possible to ensure that we reach the "important" individuals within the account. In all cases we verify that the survey is sent only to Decision Makers or Key Influencers.

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#### **KEY ELEMENT DATA**

- 1. I would like to have regular meetings with Digital to help me facilitate future planning. These people AGREE:
  - 1. Carneal, Tom
  - 2. Christensen, John
  - 3. Dunkin, Guy C.
  - 4. Flynn, Len
  - 5. Ford, Eric
  - 6. Gamble, Larry
  - 7. Hill, Gary
  - 8. Kendell, Brad
  - 9. Konkol, Mark

- 10. Mankins, Larry
- 11. McCarthur, Allan
- 12. Nielsen, Erich
- 13. Phillips, Adele
- 14. Pilgrim, Charles
- 15. Quick, Grady H.
- 16. Recchione, Sandro
- 17. Simonsen, R. H.
- 18. Smith, Ronald G.

- 19. Thornton, Joel
- 20. Weber, Kenneth E.
- 21. Williams, Gregory T.
- 22. Wilson, Bruce
- 23. Wolvington, Howard
- 24. Wright, J. Robert
- 25. Zeviar, Florin

- 2. I do not meet with Digital's Senior Management frequently enough. These people AGREE:
  - 1. Carneal, Tom
  - 2. Ford, Eric
  - 3. Gamble, Larry
  - 4. Hill, Gary
  - 5. Ingebretsen, John
  - 6. Kendell, Brad

- 7. Mankins, Larry
- 8. May, Robert
- 9. McCarthur, Allan
- 10. Nielsen, Erich
- 11. Phillips, Adele
- 12. Pilgrim, Charles

- 13. Recchione, Sandro
- 14. Simonsen, R. H.
- 15. Slepski, Joe
- 16. Weber, Kenneth E.
- 17. Wilson, Bruce
- 18. Zeviar, Florin

- 1. How satisfied are you with the quality of systems support you receive from Digital? These people are DISSATISFIED:
  - 1. Ford, Eric
  - 2. Gamble, Larry
  - 3. Hill, Gary
  - 4. Nielsen, Erich
  - 5. Thornton, Joel
  - 6. Zeviar, Florin
- 2. How satisfied are you with Digital's delivery of equipment? These people are DISSATISFIED:
  - 1. Ford, Eric
  - 2. Gamble, Larry
  - 3. Hill, Gary
  - 4. Kendell, Brad
  - 5. Thornton, Joel
  - 6. Wolvington, Howard
- 3. How satisfied are you with the ability of Digital's administrative processes to meet your company's administrative needs?

These people are DISSATISFIED:

- 1. Ford, Eric
- 2. Gamble, Larry
- 3. Hagan, Wayne
- 4. Hill, Gary
- 5. Kendell, Brad
- 6. Quick, Grady H.

- 7. Recchione, Sandro
- 8. Richers, Henry J.
- 9. Simonsen, R. H.
- 10. Thornton, Joel
  - 11. Wright, J. Robert
- 4. How satisfied are you with Digital's process of billing and invoicing? These people are DISSATISFIED:
  - 1. Ford, Eric

7. Thornton, Joel

- 2. Gamble, Larry
- 3. Heany, Tom
- 4. Hill, Gary
- 5. Kendell, Brad
- 6. Quick, Grady H.

- 5. How satisfied are you with the quality of Digital's hardware? These people are DISSATISFIED:
  - 1. Recchione, Sandro
  - 2. Wolvington, Howard
  - 3. Zeviar, Florin
- 6. How satisfied are you with the value that your company receives from its investment in Digital's products and services? These people are DISSATISFIED:

- 1. Barry, Gregory
- 2. Hill, Gary
- 3. McCarthur, Allan
- 4. Nielsen, Erich
- 5. Recchione, Sandro
- 6. Simonsen, R. H.

- 7. Thornton, Joel
- 8. Weber, Kenneth E.
- 9. Wolvington, Howard
  - 10. Zeviar, Florin
- 7. How satisfied are you with Digital's servicing of their equipment? These people are DISSATISFIED:
  - 1. Gamble, Larry
  - 2. Ingebretsen, John
  - 3. Wilson, Bruce
- 8. How satisfied are you with Digital's ability to provide solutions to enhance your company's competitiveness?

These people are DISSATISFIED:

- 1. Gamble, Larry
- 2. Hagan, Wayne
- 3. Kendell, Brad
- 4. Mankins, Larry
- 5. Nielsen, Erich

- 6. Recchione, Sandro
- 7. Simonsen, R. H.
- 8. Thornton, Joel
- 9. Williams, Gregory T.
- 10. Wilson, Bruce

- 11. Wolvington, Howard
- 12. Wright, J. Robert
- 13. Zeviar, Florin
- 9. Based upon your most recent experience, how satisfied are you with your relationship with Digital's personnel?

These people are DISSATISFIED:

- 1. Ford, Eric
- 2. Gamble, Larry
- 3. Kendell, Brad
- 4. Murphy, James
- 5. Nielsen, Erich
- 6. Recchione, Sandro

- 7. Richers, Henry J.
- 8. Williams, Gregory T.
- 9. Wilson, Bruce

	COSTOWER DISSATISFACTION DATA
10.	How satisfied are you with the level of commitment and enthusiasm displayed by Digital's people?  These people are DISSATISFIED:  1. Gamble, Larry  2. Kendell, Brad  3. Recchione, Sandro  4. Williams, Gregory T.  5. Zeviar, Florin

- 11. Based upon your most recent experience, how satisfied are you with Digital's Sales Representatives?

  These people are DISSATISFIED:
  - 1. Ford, Eric

7. Recchione, Sandro

2. Gamble, Larry

8. Slepski, Joe

Kendell, Brad

9. Visconty, Mark

- 4. Konkol, Mark
- 5. Nielsen, Erich
- 6. Phillips, Adele
- 12. How satisfied are you with Digital's installation of equipment?

  These people are DISSATISFIED:
  - 1. May, Robert
- 13. Based upon your most recent experience, how satisfied are you with Digital's Service Representatives?

  These people are DISSATISFIED:
  - 1. Ford, Eric
  - 2. Gamble, Larry
  - 3. May, Robert
  - 4. Murphy, James
  - 5. Recchione, Sandro
- 14. How satisfied are you with the quality of software supplied by Digital? These people are DISSATISFIED:
  - 1. Carnes, Ray

7. Zeviar, Florin

- 2. Hill, Gary
- 3. Kendell, Brad
- 4. Nielsen, Erich
- 5. Phillips, Trenneth
- 6. Wolvington, Howard

- 15. How satisfied are you with Digital's ability to service non-Digital equipment? These people are DISSATISFIED:
  - 1. Carnes, Ray
  - 2. Eucker, Brad
  - 3. Ford, Eric
  - 4. Hagan, Wayne
  - 5. Heany, Tom
  - 6. Hill, Gary

- 7. Recchione, Sandro
- 8. Richers, Henry J.
- 9. Williams, Gregory T.
- 16. Based upon your recent experience, how satisfied are you with Digital overall? These people are DISSATISFIED:
  - 1. Ford, Eric

7. Zeviar, Florin

- 2. Hill, Gary
- 3. Nielsen, Erich
- 4. Recchione, Sandro
- 5. Richers, Henry J.
- 6. Simonsen, R. H.

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## Printed by RUSS GULLOTTI @MKO DIGITAL INTERNAL USE ONLY Document

#### INTEROFFICE MEMORANDUM

Doc. No: 073904

Date: 05-Jul-1994 05:13pm EDT

From: ROBERT TASSONE

TASSONE.ROBERT AT A1NWD002 at

Dept: sales

Tel No: 206-637-4281

TO: russ gullotti @mko

Subject: RCAS - Our concall of 7/6/94

Russ,

Attached is John Magnusson's summary and suggestions of the recent change of status re RCAS and Digital. Naturally, John has some emotion in his summary regarding the current circumstances; like you and I did on SMARTS. Jim Collera, West Coast PSC V.P., myself, and Steve Garrett were copied on the note.

This memo from John is what you and I will discuss on the concall. All is not as bleak as John describes but his concerns are legitimate. Bear in mind that SI was always less than 10% of total RCAS Program revenue and we knew that we've always been facing the 5500/5000-240 end of life scenario. Basically, Boeing has screwed up both major blockpoint releases of the Software and must make the next release (1/95) or they risk the Army terminating for convenience. The choice is not a biased one, but one of survival. The majority of work has been done on SCO-UNIX, the deployment of Intel based systems is easier and more positive than a port to Alpha.

Additionally, we recently won the PC business and it appears that we have a good chance of winning the Intel Pentium Server RFP that will be coming out in the near future. The Intel Pentium's will number approximately 650-700 servers.

The reason for the concall is to appraise you of the situation, seek some advice and to prepare you should Stan or Jimmy call re this decision.

I look forward to talking to you.

Tass

#### DIGITAL INTERNAL USE ONLY Document

#### INTEROFFICE MEMORANDUM

Date:

01-Jul-1994 10:24am EDT

From:

JOHN MAGNUSSON @VFO

MAGNUSSON. JOHN AT A1 at GUCCI

Dept: Services

Tel No:

1-800-759-8888 PIN 2165622

TO: James Collora @LAO
TO: David Finkel @LAO
TO: Steve Garrett @WRO
TO: Bob Tassone @seo

We Boem's Ided most

Subject: RCAS PM views and Position on Current Situation

Thanks you all for taking the time yesterday on the conference calls. We are faced with a difficult time but as always there are ways to make the best out of a situation. As the Digital PM, I feel compelled to express my views and recommendations in writing as I sensed from the calls that those that are viewing the situation from their own perspective and line of business. I consider this normal and as the PM I am forced to view it from the total perspective including the customer's and Digital's as a whole.

DISCLAIMER: None of the following statements are intended to be critical of any individual or organization other than maybe Boeing. The statements are meant to be statements of fact or opinion and not to be offensive to anyone in particular.

The current situation is that Boeing is in the process of convincing the Army that the DEC MIPS systems be replaced by Intel Pentium systems in the RCAS units. The MIPS systems will remain in the RCAS Mail Hubs running SGMLS+ for the foreseeable future. This decision is not one that we can reverse. It has formally been passed on to the Boeing platform engineering group and GRC coders have been told if they have any problems on the DEC, not to worry about them and concentrate their efforts on the Intel systems.

#### Impact to Digital:

- No more SGMLS+ licenses nor MIPS systems will be brought by Boeing for RCAS. To date Boeing has purchased 61 SGMLS+ licenses and have sufficient MIPS systems to field the two remaining Mail Hubs yet to be fielded. To date Boeing has paid \$258K for the licenses. To date we have paid SecureWare and Retix royalties for 100 licenses. The unused royalties are unrecoverable per existing contracts.
- This removes the revenue stream that provided the funds to off set the expenses of the PMO management staff (headcount of three). Funding for the PMO was from system software sales and revenue from MCS. When

the PC proposal was submitted, PCBU said they would not price in the expenses for the PMO nor would they share in funding of the PMO, therefore with a shift from MIPS to PC, the majority of the revenue will be to a line of business that will not support the PMO. The margins on the PCs are bear bones and can only support the commissions for the SBU and PCBU sales people.

- More than likely Boeing will not renew the Purchase Order for the continuation of the DC consultant on site. Current funding for him will run out around the middle of November.
- The Purchase Order for SGMLS+ maintenance covers us through Dec 95 and probably wil not be extended beyond that since by then Boeing will have figured out a way to do the Mail Hubs without SGMLS+. By then Boeing will also be upgrading the SCO operating system and will not be willing to pay for SGMLS+ upgrades needed to maintain interoperability. There is also a possibility that Boeing may choose to terminate it earlier since most of the current SPRs are against the application interface and there have been very very few against the mail hub systems.
- Boeing will probably remove a significant number of the MIPS systems from maintenance and revert to percall and cannibalization to keep the systems going. The only systems that will need to be maintained with the responsiveness are those in the Mail Hubs and those at the Boulder test site. We estimate that will be 16 systems out of the 89 already purchased.
- The need for the resident MCS technician will go away. Customer will not like the loss as Tim has been a great help to them and they have become use to the fast response and his "out of scope" efforts when not involved in direct maintenance.
- John Garner will have to be let go by the end of November since Charles Woodward will no longer be the DC consultant on site. John is a contract and Charles is a Digital employee and the SGMLS+ maintenance dollars do not support two engineers. The customer will not be happy about the loss since they have been working with John for the life of this program. They respect Charles but recognize that John is the brains behind the security part of SGMLS+.
- Without a source of revenue to offset the expenses of the PMO Digital will not be able to meet its obligation concerning a PMO resulting from the PC proposal. The proposal included a PMO and the proposal is included in the agreement (not yet signed) by reference. DC's position was that no reference would be made to the PMO in the proposal without agreement on funding. Since SBU committed to cover the PMO and work the issue once the deal was won, the PMO was included. With this latest development, SBU does not have the revenue stream to implement their commitment. Because the agreement has not been signed although the negotiations almost complete, we have the opportunity to negotiate out all reference to the PMO but that decision is needed soonest. Boeing placed its first order for PCs today and will expect us to sign the agreement next week. Decision on the PMO is therefore

needed in a hurry.

- Digital is obligated to pay SecureWare \$1,000 a month, paid annually, in addition to royalties, as long as Digital is part of the RCAS Program. Next payment is due 16 July 1994. We can try to get out of this but have no legal grounds at this point. This is going to be an annual expense with no direct source of off setting revenue.

Now for one man's view (the PM's) on how this situation developed.

The reasons are deep rooted from the start of the Program. Application development has been a poorly (obviously an opinion) managed effort and in trouble from the beginning. GRC (the software developing subcontractor) has continuously blamed DEC for all that was wrong on the development side. In the beginning they said they couldn't develop on the DEC because of the unstable 5500s and every time a problem arose on the DECs they pointed the finger at us. Boeing management in the form of John Clark and especially Howard Wolvington have been prejudiced against Digital so they believed GRC in spite of any actions or counters we would provide. GRC's claims were even disputed by some middle managers such as Bill Eisemann to no avail. Over the last couple of months we have had documented evidence of the inability of the applications to run on the DEC and have both in writing and in verbal discussion presented the real data and Boeing management has now had to face the reality that GRC did not consider the DEC in both their design and implementation of code. This especially is true of the applications support software that tends by nature to be platform specific.

We have tried both from a technical and fielding viewpoint to point out to Boeing that the Boeing RCAS staff was not putting any DEC awareness into the overall RCAS effort. We never were part of planning nor review with he other part of the Program in that we were far enough out in the future that the out of sight out of mind mentality prevailed. Boeing was also naive enough to think that the applications developed for the Intel systems would port directly to the DEC platforms. Unfortunately, Boeing did not start testing until recently so it was difficult to convince them that there were troubles ahead.

As everyone is aware the software development is already two years behind schedule (not bad for only having the program for two and a half years), and they are under the gun to have the system to the Government If not delivered in good working order, there is strong indications that the Program will revert to the Active Army and Boeing will be out the door. Needless to say they are doing everything possible now to meet that deadline. Unfortunately we are a victim to both their mismanagement and GRC's poor performance. Just try and convince Boeing management of that. Boeing is much closer to being able to deliver the application on an Intel platform than they are on There is not enough time to go back and correct all the MIPS systems. of the coding error on the DEC side to make the January deadline. The only hope they have is to be able to clean up the code and performance on the Intel boxes and HOPE that the Pentium systems can be sufficient until the faster Pentiums and buses are available. It's a technical

gamble they have to take. There is obviously not enough time to get an all ALPHA version in place to meet the deadline.

The official reason for the switch is to save money but the above is our best estimate at the real situation based on input we have from our interaction with the grunts in applications development and Boeing engineering. We also have input from lower and middle management that would suggest the above to be correct. I will not attest to the fact that upper level management (Howard, Jimmy, or even Stan) understand the underlining reasons as history have shown that Boeing upper level management tends to not hear the truth or are shielded from the truth. They tend to hear what they want and managers thus tell them what they want to hear and blame others (such as Digital) for any ills and hide real reasons for recommendations. We already have evidence that Boeing in our opinion is misrepresenting data about the Pentium and ALPHA to the Government to support their position. I seriously doubt that this is being done knowingly or intentionally by Jimmy and Howard.

We got first wind of this action by Boeing last week when we pieced together several bit of information and events. We confronted Sharon Lindley (Block X Manager and our designated technical Point of Contact) with our suspicions and she verified that our conclusions were correct but said we were on a even playing field with SCO although further information revealed that not to be the case. She was really surprised that we had figured it out since it was being done within Boeing on a very limited need to know basis and kept very secret. It should also be mentioned that when Boeing put out the RFI, I was given a heads up by the head of Procurement and told not to be concerned as it didn't mean the end of the SGMLS+ and that they were going thru a drill. We in fact did not become concerned about them doing a full replacement in that our analysis of the Pentium system technology, although a long way past the 486/66, could not meet the throughput or data base size requirements of RCAS. So much for honesty but again, Mike, the head of Procurement probably was told what he told us and was unaware of the real reason behind the RFI. Remember Boeing is in a bind and the all Intel solution is the only way the can meet schedule. That doesn't say they will because there are still significant technical problems. example, the other day in standup it was announced that they had reached a significant milestone in that there were now less than one hundred outstanding critical SPRs against the Applications. For those of you who have been around the program for awhile, you know the screaming they do at us when there is a single critical SPR open against SGMLS+. Would you say Boeing is a bit two faced when it comes to screaming when it is someone else's problem but how quiet they are when it is their's? (Sorry, I can resist being a bit cynical after dealing with this customer for over two years.)

Okay, now that you have read this far, let's see where the beef is.

#### Recommendation:

First, Charge Boeing 1.8M for the code changes in sendmail that improve performance. Allow them to pay \$300k a quarter for the next six quarter. Put a restriction in that if they lose the program during

the six quarter, the remaining amount is due in full at that time (Contracts can come up with the correct wording).

Second, if they wouldn't agree to that, disband the PMO. Transfer PM responsibility to the three sales persons involved (SBU, PCBU, and MCS), transfer responsibility for support of SGMLS+ to MCS as we do for any discontinued product, and try to find new homes for the PMO staff.

Third, if they wouldn't stand to have us do the second, offer to renegoitate the existing agreements involving SGMLS+ and raise the price to recoup the investment. Basically I think that \$130K a month would recoup the investment and keep the PMO funded.

#### Rationale:

First and foremost is that Boeing over the life of the Program has threatened us to lose that business if we didn't perform and make the investments to make Boeing happy. Well we did and they still pulled the business. I fell they owe us at least our investment. We have to accept the reduction in future revenue as a result of their actions as a consequence of doing program business when we didn't build in the safe guards at the beginning.

The investment by Digital into SGMLS+ and some things in MLS+ amount to some where close to \$2.0M. Boeing has paid us so far a little over \$200K, thus the 1.8. I would be willing to accept 1.5 but would like to go in at 1.8. If we offer to spread it out over six quarters it will be easier to swallow.

Boeing was going to make major investments in hardware and software to implement at least two new labs and it was going to cost them in excess of \$2.0M. Why would they object to spending some of that with us to keep us in the program? They need us badly and they definitely need the code modification for performance. By the way, there is not contractual agreement that addresses performance (speed) so they cannot issue a valid SPR that we would be obligated to address under the maintenance agreement.

If we don't find another source for funding for the PMO, it will go away and it has been the major reason for customer satisfaction on this program and they want it to stay. One of the selling points to Boeing for this deal will be that with the quarterly payments we will keep the PMO intact. That will cover us for the period of the PC agreement and the SGMLS+ maintenance agreement.

We through other means, such as value base pricing of the modifications to SGMLS+ and maintenance have already made up some of the investment to the tune of approximately \$700K but Boeing doesn't need to know that.

Some of you will be hesitant to be bold as suggested above for fear that it will jeopardize the potential PC revenue. My humble opinion is that with the low margins on the PCs and Boeing's track record of nickel and dimeing their vendors, we could easily lose the PC business

after the initial eighteen months. Remember the agreement is only until DEC 95 and Boeing has left themselves an out. Keep in mind Zenith PCs and Digital MIPS and the loyalty displayed by Boeing. We could win the battle but lose the war or make negative margin or profit.

The iron is hot and now is the time to strike. As the PM, I am asking management for quick action on the program so that we don't lose an opportunity or give away potential revenue.

Thanks for your attention and we in the PMO will continue to do our job while management addresses this issue.

John

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#### INTEROFFICE MEMORANDUM

Doc. No: 074167

Date:

12-Jul-1994 12:49pm EDT

From:

ROBERT TASSONE

TASSONE.ROBERT AT A1NWD002 at WROMTS at WRO

Dept:

sales

Tel No:

206-637-4281

TO: See Below

Subject: RCAS Concall w/Bob Tassone 7/13/94

Russ,

Attached is a proposal we will deliver to the Boeing RCAS Team on Friday, July 15, 1994. The intention is to maximize Digital's remaining revenue in the Program. The Proposal will enable:

1. Maintaining the Digital/RCAS PMO thru FY '95 at a 40% margin proposing an additional \$800k+ for RCAS Performance enhancements in addition to the \$619K backlog going into FY '95 for an approximate \$1.2-\$1.4M RCAS DC revenue stream in FY '95.

Steve Garrett, Western PSC Manager is in agreement with this Proposal and strategy.

- 2. Maintaining the Digital PMO will afford:
  - -Securing the on-going deployment and maximizing uplift of the RCAS Digital PC contract worth a minimum \$6M-10M of which we expect \$3.0M in FY '95 revenue.
  - -Keeps Digital well integrated into the Program for the future capture of DC and SBU business.
  - -Will be helpful in leveraging the Pentium Server insertion (MIPS) opportunity for 600+ Servers estimated \$10M SBU opportunity.
  - -Helps keep Customer satisfaction high in regard to Digital vs. other vendors on RCAS.
- 3. Your Action Items:
  - -We'd like you to place a call to Stan Beckelman on Thursday, July 14, 1994; alerting him that a proposal is coming and some dialogue around:

# - In wherest of no surrpuses - propose coming re: PMD

- -You/Digital is deeply disappointed with the recent decision to suspend the purchase of Digital RISC servers and future SGMLS+ Licenses.
- -Digital had a planned revenue stream that originated around \$165M, was modified down with product insertion(5800's-5500's-5000/240's) to around \$120M (h/w, software licenses and MCS).
- -We've realized only \$17M program to date and will experience an immense planned revenue stream shortfall and have not even recovered our original software development investments resulting in a significant write-off during the last week of our Fiscal Year.
- -While we appreciate winning a hard fought PC opportunity, margins are thin; close to breakeven, we expect to be awarded the Intel Pentium Server business as a product insertion and not a rebid.
- -The proposal outlines the viability of the PMO and provides Boeing with a set of parameters and decisions regarding level of support from Digital in the future.

Attached is a draft of the Proposal. I plan on calling Jimmy Smith, Boeing PM the same day that you call Stan to alert him of the same. These calls from you and I meets Jimmy and Stan's requirement of not be alerted or surprised.

We think this is a good strategy and proposal. Digital needs to be firm and strong with Boeing on expecting this business because we've earned it as a key vendor and supporter of RCAS.

I'll talk to you tomorrow. Your planning to call me at my home at 11:00 a.m., EST at 206/643-2786.

Regards,

Bob

#### Distribution:

russ gullotti @mko

CC: JOHN MAGNUSSON @VFO toby arnold @seo CC: CC: steve garrett@wro cc: paul bendik@vfo CC: bob eliot@vfo

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#### INTEROFFICE MEMORANDUM

Date:

12-Jul-1994 12:17pm EDT

From: Dennis Buckler @DCO
BUCKLER.DENNIS AT A1 at GUCCI at DC(
Dept: ADEG/Federal Contracts Group
Tel No: (301)306-2261

TO: Bob Tassone @seo

Subject: Edited letter to Boeing Re: PMO

Mr. Harry B. Prior IV Boeing Information Services Inc. RCAS Project 7990 Boeing Court MS CV-91 Vienna, Virginia 22182

Subject: Proposal for Continuation of Digital RCAS Support

Dear Mr. Prior,

Digital Equipment Corporation is pleased to submit this proposal for the continuation of Digital support on the RCAS program through June, 1995. Digital will provide SGMLS+ v1.8 and MLS+ v1.0a-X.7 for a price of \$876,745. Attachments A presents the details of the proposal. Attachment B provides a description of the SGMLS+ v1.8 modification for performance improvements.

If Boeing agrees to the provisions of Attachment A by 21 July 1994, Digital will commit to the following.

- 1. Digital will maintain a Program Management Office within the vicinity of the curent Boeing PMO location through June 1995.
- 2. Digital will maintain a sparing of 486 PCs in the PMO.
- If Boeing does not agree to the provisions of Attachment A, Digital will implement the following actions:
- 1. The responsibilities of the Digital RCAS PMO will be reassigned within Digital effective 9 September 1994 and the PMO will cease to exist.
- 2. Responsibility for satisfaction of MLM SOW will be transferred to a Digital Consulting Professional Service Center within the Washington, DC area. A point of contact will be provided to Boeing by 9 September.
- 3. Responsibility for SGMLS+ support will be transferred to the Digital organization responsible for support of retired products. A point of contact will be provided to Boeing by 9 September.
- 4. Program management responsibilities will change to account management and a designated account representative. Digital will notify Boeing of the designation by 9 September.
- 5. Responsibility for order management will be transferred to the various order management organizations within the involved lines of business. Points of contract will be provided to Boeing by 9 September.

6. Responsibility for PC delivery will be transferred to a designated PC sales representative. Digital will notify Boeing of the designation by 9 September.

Digital will address the issue of a dedicated on-site maintenance technician upon receipt of the Purchase Order for hardware maintenance covering the installed base during Government FY95.

If you have any questions on the above, please contact me at 301-306-2261.

Sincerely,
DIGITAL EQUIPMENT CORPORATION

. . . . .

By: \_\_\_\_\_\_\_
Dennis G. Buckler
Senior Contracts Negotiator

Federal Contracts Management Group

#### Attachment A

1. Current Purchase Orders remain in effect until all services or products are delivered per the Purchase Order. This includes Purchase Orders for:

SGMLS+ v2.0 On-site Engineering Support SGMLS+ Maintenance Support

- 2. Boeing issue to Digital a Purchase Order in the amount of \$163,200. for continued on-site engineering support for 1200 hours @\$136 per hour. Period of performance will be the date the current funds are consumed on existing Purchase Order for on-site engineering support or 15 November 1994, which ever is earlier, to 30 June 1995. Boeing agrees to pay Digital an amount equal to the unbilled hours remaining on the Purchase Order times \$136 in the event the end of the performance period is reached without utilizing all of the hours. Payment will be due monthly based on the hours delivered during the preceding month.
- 3. Boeing issue to Digital a Purchase order for delivery of SGMLS+ v1.8 and MLS+ v1.0a-X.7 (which will include the modifications for RCAS performance improvements) in the amount of \$876,745. Delivery date will be no later than 29 July 1994.

Current and future Purchase Orders will not be subject to the Termination for Convenience. In the event of termination, the full amount of the P.O.s shall be immediately due and payable to Digital.

#### Attachment B

Decription of SGMLS+ Modification for Performance Improvements

- o sendmail caches the /etc/hosts file to alleviate host lookup times for large host files.
- o due to host file caching, sendmail was modified to run in immediate delivery mode (signified by the Odj flag in the sendmail.cf). Immediate delivery mode is a combination of background and queued mode and can be determined by the host type. The host types are determined by a mask-value pair defined in sendmail.cf as follows:

Direct Delivery hosts are hosts that have a link that is not easily saturated. Mail will be delivered immediately as it would be in background mode. Any number of incoming connections generate an immediate outgoing connection to the appropriate direct delivery host(s). For example, mail hubs are direct delivery hosts. They are defined as CD(255.255.0.0,55.249.0.0) in the sendmail.cf.

Polling hosts are hosts that are not connected all the time. They will selectively connect to the mail server and initiate a TWA process that will retrieve queued mail for that site. Incoming mail destined for these sites will be queued and delivered later by a TWA process. For example SCO's that connect via an SDD are Polling hosts. They are defined as CP(255.255.0.0,55.254.0.0) in the sendmail.cf.

Hardwired hosts are hosts that are not included in any mask-value pair. The messages destined for these hosts will be queued upon receipt and delivered serially via a "running queue" or TWA process.

The "running queue" processes are throttled by CRn and CCm entries defined in sendmail.cf, where n is the number of simultaneous "running queue" processes possible and m is the number of concurrent servers per "running queue". Each server will deliver to one and only one host. Queues are locked on a host basis, not individual message. If a second "running queue" server tries to deliver to a host that is already locked it will exit. The priority of the queues are ordered by the host with oldest message, then the host with the second oldest, and so on.

- o disabled super-safe mode, thus stopping sendmail from creating the queue entries for direct delivery hosts. This option is defined as Os in sendmail.cf.
- o use of Block and Set file locking mechanism.
- o splitting the queue directory into a data file directory, a control file directory, a temporary file directory, a transcript file directory, and a host directory where the host lock files are stored (the host lock file is an empty file that is named with the ip address of the host). The split directory was created to keep the directory size to a minimum. This will reduce the time sendmail spends searching through files.

- o sendmail files will be named XXXXXX.YYYYY.ZZ where XXXXXX is the 6 low order bytes of the current time stamp in hexadecimal notation, YYYYY is the 5 digit process ID of the incoming sendmail process, and ZZ is a two character identifier in the range AA through ZZ used in the unlikely event that two files are created by the same process within the same second. This implementation will remove the time needed in deciding what to name the new data file.
- o Ox and OX can be set to 0 which will turn off load average checking, thus saving substantial, normally audited, work.
- o improvements in the /etc/hosts hashing algorithm.
- o sendmail can be started from the /tcb/files/rc.local script with the following command:

/usr/lib/sendmail -bd -q30m -om -z15&

#### where:

٠.,

- -bd tells sendmail to run in daemon mode,
- -q30m tells sendmail to run the mail queue every 30 minutes
- -om tells sendmail to run with the "send to me too" option
- -z is the TWA addition. The settings on the z flag are as follows:

bit	function
1	TWA enabled
2	Assume ONEX (Single message per connection)
4	Suppress statistics
8	No transcript file created

Boeing Defense & Space Group P.O. Box 3999 Seattle, WA 98124-2499



June 21, 1994 9-5746-WMH-012

Anthony B. Morris
Vice President
Government Programs
Digital Equipment Company
8301 Professional Place
Landover, MD 20785-2278

Mr. Tony Morris:

Last year when you visited us in Seattle, you were briefed on the progress of the STARS contract and the capabilities of our Digital VMS based Software Engineering Environments (SEE). Since that time, the project team has made substantial improvements in the SEE to more fully provide support for large projects following a process-driven, reuse-based software development methodology. In fact, the SEE has been delivered to and is successfully being applied to a Navy project in the development of a flight simulator using just such an approach.

With the increase in demonstrable capabilities and utilization of the STARS SEE, we are having more opportunities for technology transfer to various companies, organizations, and agencies. This is due in part to the attention being drawn to the Navy demonstration projects' innovative application of STARS technology. It is also due in part to increasing acceptance of the STARS concept of process-driven, reuse-based software development.

With increasing awareness and acceptance of STARS technology, we are having more and more opportunities to deploy STARS SEEs. However, we have been largely unsuccessful in this effort due to the dependency of our SEE on the VMS operating system. Potential users need a hardware and software solution that is predicated on open system standards. This is especially true for those organizations that have committed to open system platforms. It should also be noted, that although our demonstration project is a real time application, our SEE is very appealing to organizations that are involved in traditional MIS software development.



BOEING

Page 2 Mr. Anthony B. Morris

We entered into an alliance with Digital on the STARS program in the belief that it would be beneficial to both organizations. use of VMS-based solutions was predicated upon the expectation that Digital would migrate these solutions to open systems. Certainly, a Digital commitment to migrating the STARS SEE's underlying software to open systems would greatly increase its opportunities for deployment within Boeing. Specific Digital products currently within the STARS SEE include: CDD/Repository, CDD/Administrator, DECplan, VAXset, DECdesign/Ptech, VAXAda, and VAX "C". Furthermore, based on feedback from industry, we believe that adoption of the SEE's Boeing-built reuse and process products (ROAMS and The Process Engine) by Digital is warranted. A STARS SEE, coupled with your existing MIS customer base, would provide a highly desirable and marketable product for large-scale system development and maintenance projects.

We believe that further support and adoption of STARS technologies can be beneficial to both our companies, and we look forward to hearing from you as to your plans and schedule for migration of the STARS VMS products to open systems.

To be responsive to requests from our customers this information is required by 15, July '94.

Very truly yours,

ROEING

A. B. Sheridan
Sr. Vice President

Engineering

M. R. Quamme Vice President

Computing Systems

cc: Russ Gullotti Rita Foley Bob Tassone digita!

# **Digital Overview**

- Boeing

# **Agenda**

# digital

- The Americas Area
- Digital's Financial Performance
- Key Strategies
- Core Values

Hotes from DVH

# What is Americas?

# digital

- Canada
- USA
- Latin America and Caribbean
- Digital Consulting
- MCS

- Logistics/Supply Chain
- PC Business Unit
- Industry Marketing
- Support Functions

Back-up to #6, bullet 4

Systems Business Units - Product Segment Names

UNIX/Windows NT Systems Group Software Products Group OpenVMS Systems Group Network Product Group Memory and Peripherals Upgrade Group

# 75:01 76, 88 83

# **Operating Results**

di<sub>g</sub>iltal

- Largely on track with recovery:
  - Focused strategy
  - Continued strong investments
  - Fifth quarter of improving results

# **Operating Results**

digital

# Strong Balance Sheet

- Adequate cash and reserves
- Investment credit rating of BBB+
- Universal shelf registration

דבם ככ

0

# Strategy Roll Out

# digital

- Open Client/Server Strategy
  - October 12, 1993
- Common Object Model-Microsoft
  - November 29, 1993
- Implementing Open Client/Server Now!
  - February 8, 1994
- More to come
  - More software products within Frameworks
  - Universal server platforms

Backsup to #7.

# Operating Results

Largely on track with recovery:

- Focused strategy
- · Continued strong investments
- Fifth quarter of improving results

First, let's look at how Digital is doing. Overall, we are on track with our recovery. But...

- Bad press over minor organizational changes products/industry/geographies
- press on Q2 results

Our strategy is focused. We are committed to lead with the products and services for Open Client/Server computing. One of the very few who can even attempt it all.

We continue to invest strongly in all areas where we have targeted markets. Our capital spending has been increased by \$181M over last year reflecting these investments in open client server technology and services.

This is our swin quarter of improving results:

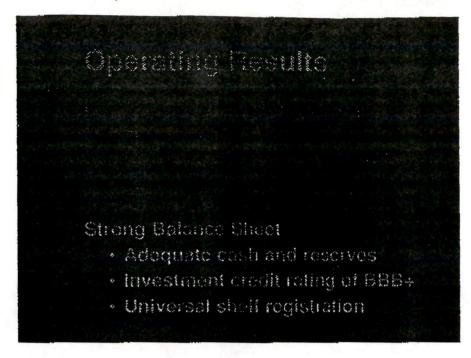
 We are still not satisfied with our results, and we are continuing to work on improving. However, after 17 straight quarters of declining year to year quarterly net income, Digital has produced six straight quarters of improvement. The last quarter

is despite a drop in sales.

A 5 point gross margin degradation and currency losses.
 Our loss has been cut in half over last year.



Back-up to#8



Digital also continues to have a very strong balance sheet. We have adequate cash and restructuring reserves

- · Cash balance is \$1.1B, adequate to meet our needs.
- Restructuring reserves of \$443M is adequate to implement the current restructuring plan this fiscal year.
- Debt to equity ratio of 17.6% is conservative with adequate borrowing capacity
- Asset management is sound and improving.
- 4.5 inventory turns 77 DSO

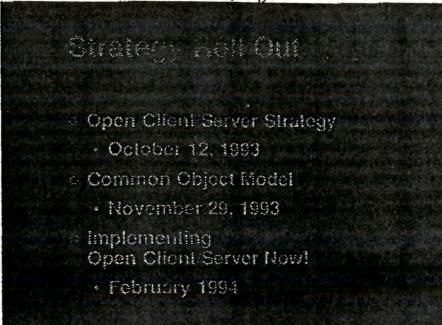
Our Investment credit rating is BBB+ = Investment Grade

- "Standard & Poors says "Current ratings reflect the Companies good overall market position, a relatively stable and profitable service revenue base representing half of sales, and a still strong capital structure. Debt leverage remains conservative..."
- Same rating held by other companies such as IBM, GTE, Kodak, Polaroid, Texas Instruments, and Sears.
- We are at a vastly reduced breakeven point 43,000 fewer people.

Digital also has a \$1B "shelf registration" with the SEC to allow future issuance of preferred stock, debt and other securities.

 This allows quick access to funds without requiring the company to actually issue securities. Back-up to#9

Distal's Key Stratesy



To put today's announcement into context with Digital's Open Client/Server technology <u>vision</u> we need only to look back a few months ago to October, 1993 when Digital introduced

- · Our single focus on Open Client/Server computing
- · Our Unified UNIX with commercial capabilities
- LinkWorks our first framework for workgroup integration, which today is also available on OpenVMS and
- · The next generation of Alpha AXP systems.

Many of you may have, in fact, participated in that event. (thousands worldwide did so).

In November, we followed with another major announcement when

- Digital announced our joint development partnership with Microsoft
- to develop Common Object Model technology, which has now become widely known as COM, and
- is the basis for our enterprise object strategy that is woven throughout Digital's software frameworks. You'll hear more about these frameworks later today
  - No technospeak but a bit about "objects"

Digital Equipment Corporation P.O. Box 92835 Bellevue, Washington 98009-2035 206.637.4000



DATE:

May 12, 1994

TO:

**Distribution List** 

FROM:

J. Robert Tassone

SUBJECT: Revision #1 - 5/94 Boeing FY'95 Account Plan

#### All:

Please replace the Account Team Structure sheet (page 5) in your copy of the Boeing Account Team - FY'95 Account Plan, sent to you recently.

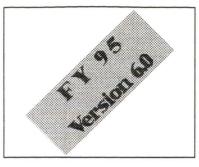
Due to some organizational changes, this page has been revised.

Thank you for your cooperation.

## **Account Team Structure**

Name	Country	Group	Manager	Location
J. Robert Tassone	USA	Western Region	Rita Foley	SEO
Tobias Arnold	USA	Boeing SAM	J. Robert Tassone	SEO
Mike Alley	USA	Boeing OPS/Admin./Fin	J. Robert Tassone	SEO
Kay Warren	USA	Admin. Assist.	J. Robert Tassone	SEO
Peyton Smith	USA	Sales Unit Mgr.	J. Robert Tassone	SEO
Richard Nehr	USA	MCS Sales SEO	Cindy Sauln	SEO
John Magnusson	USA	Prog. Mgr.VFO	David Finkel	VFO
Malcom Jones	USA	Boeing CSP WRO	R. Linting	WRO
David Hartzband	USA	Boeing Tech. Partner	B. Supnik	LJO
Russ Gullotti	USA	Executive Ptnr.	Ed Lucente	MKO
Jim Patrice	USA	MCS DM SEO	W. Hooks	PDO

Name	Country	Group	Sales Manager	Location
Europe	,			
Jean-Louis Soudan	France	Sales	Jim White	ATY
Vladimir Orlov	Russia	Sales	Jim White	MOW
USA				
John Drenguis	USA	Boeing Unit	Toby Arnold (Acting)	Bellevue, WA
Fred Kraus	USA	Boeing Unit	Toby Arnold (Acting)	Bellevue, WA
Bill Ballentine	USA	Boeing Unit	Toby Arnold (Acting)	Bellevue, WA
Al Crowder	USA	Boeing Unit	Toby Arnold (Acting)	Bellevue, WA
Lynn Lunn (50%)	USA	Boeing Unit	Toby Arnold (Acting)	Bellevue, WA
Al Morgan	USA	Boeing Unit	Toby Arnold (Acting)	Bellevue, WA
Debra Wieland	USA	Boeing Unit	Toby Arnold (Acting)	Bellevue, WA
Jim Bocinsky	USA	Boeing Unit	Toby Arnold (Acting)	Bellevue, WA
Bob Holmes	USA	Boeing Unit	Toby Arnold (Acting)	Bellevue, WA
Bob Eliot	USA	MFG	Paul Bendik	Wash. D.C.
Joe Batista	USA	MFG	B. Rivera	Philadelphia, PA
Jim Cooper	USA	MFG	M. Supple	Wichita, KS
Pam Shields	USA	MFG	K. Renner	Huntsville, AL
Maylon Zerbe	USA	MFG	Ralph Broadstreet	Houston, TX
Lee White	USA	Sales	P. Van Cleeve	Dallas, TX
Martha Marchione	USA		Open	Santa Clara, CA
APA				
Kiyoshi Yotsukura	Japan	Sales	Open	TKO
*			-	





# ─ BOEING Account Plan - FY95

Version:	☐ Draft ■ Proposal / Revision No_1 ☐ Approved (by		Revision Date _4/15/94 Review Date4/27/94
	Copy Assigned to Distribution	n List	Copy No
Acco	ount class: Global	DBA#: 3930900	Account ID: 9256819

## digital

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Covered by this agreement.

Version 6.0

Printed on April 17, 1994 at 09:09

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#### **Executive Briefing**

Account Name:

The Boeing Company

Headquarters location:

Seattle, WA

Size (their sales in M\$):

\$25.4 Billion

Fortune or B/W Rank: 14

Capital spending:

\$ 1.3 Billion

Industry Rank:

**SEO** 

Total DP Budget:

\$ .710 Billion

DEC share of installed CPUs:

9%

Digital total account revenue:

\$30.3M FY'94 Estimated

Account Executive: Account Executive's Manager: Territory Manager: Business Unit Manager: **Executive Partner:** Technical Partner:

J. Robert Tassone Rita Foley Scott Roeth Herb Shumway Russ Gullotti David Hartzband

Location: Location: Location: Location: Location:

Location:

WRO DTN: **MKO** DTN: **MRO** DTN: **MKO** DTN: LJO DTN:

DTN:

264-1132 223-3226 264-6210 226-2878

545-4281

521-4351

Chairman/CEO: President President. President President

President

Frank Shrontz Phil Condit John Warner Jerry King Ron Woodard

Stan Beckelman

The Boeing Company The Boeing Company Boeing Computer Services (BCS)\*

Boeing Defense and Space Group (D&SG) Boeing Commercial Airplane Group (BCAG) Boeing Information Systems, Inc. (BISI)\*

Key information decision maker:

John Warner, President, BCS\*

Stan Beckelman, President, BISI\*

Walt Braithwaite, VP Computing, BCAG Mike Quamme, VP Computing, D&SG

Product interest:

OSF/1, Client-Server, FBE, CATIA, 3D, Graphics, Networks, Legacy Systems Downsizing, S/W Re-use, Data Base/Data Access, DB Servers, Reduced Systems Maintenance, S/W Distribution / Maintenance, Quality

Key issues:

- Reduce Cost of Computing 25%
- Reduce CPU Maintenance 25% - Consolidate Computing Support
- Reduce Number of Vendors Go to Key Supplier Strategy
- Develop Common Architecture via Standards

Relationship:

- Good across the Account
- As a result of recent Corporate Visits (10/93, 2/94, 3/94) to Digital by Key

Executives and Directors, Digital is held as: - a key supplier to Boeing with IBM and HP

- a major player in Boeing's future

## **Account Team Structure**

Name	Country	Group	Manager	Location		
J. Robert Tassone	USA	Western Region	Rita Foley	SEO		
Tobias Arnold	USA	Boeing SAM	J. Robert Tassone	SEO		
Mike Alley	USA	Boeing OPS/Admin./Fin	Boeing J. Robert Tassone			
Kay Warren	USA	Admin. Assist.	J. Robert Tassone	SEO		
Peyton Smith	USA	Sales Unit Mgr.	J. Robert Tassone	SEO		
Richard Nehr	USA	MCS Sales SEO	Cindy Sauln	SEO		
John Magnusson	USA	Prog. Mgr.VFO	David Finkel	VFO		
Malcom Jones	USA	Boeing CSP WRO	R. Linting	WRO		
David Hartzband	USA	Boeing Tech. Partner	B. Supnik	LJO		
Russ Gullotti	USA	Executive Ptnr.	Ed Lucente	MKO		
Jim Patrice	USA	MCS DM SEO	W. Hooks	PDO		

Sales Specialists				
Name	Country	Group	Sales Manager	Location
Europe				
Jean-Louis Soudan	France	Sales	Jim White	ATY
Vladimir Orlov	Russia	Sales	Jim White	MOW
USA				
John Drenguis	USA	Boeing Unit	Peyton Smith	Bellevue, WA
Fred Kraus	USA	Boeing Unit	Peyton Smith	Bellevue, WA
Bill Ballentine	USA	Boeing Unit	Peyton Smith	Bellevue, WA
Al Crowder	USA	Boeing Unit	Peyton Smith	Bellevue, WA
Lynn Lunn (50%)	USA	Boeing Unit	Peyton Smith	Bellevue, WA
Al Morgan	USA	Boeing Unit	Peyton Smith	Bellevue, WA
Debra Wieland	USA	Boeing Unit	Peyton Smith	Bellevue, WA
Jim Bocinsky	USA	Boeing Unit	Peyton Smith	Bellevue, WA
Bob Eliot	USA	DMD	Paul Bendik	Wash. D.C.
Joe Batista	USA	DMD	B. Rivera	Philadelphia, PA
Jim Cooper	USA	DMD	M. Supple	Wichita, KS
Pam Shields	USA	DMD	K. Renner	Huntsville, AL
Maylon Zerbe	USA	DMD	Ralph Broadstreet	Houston, TX
Lee White	USA	DMD	P. Van Cleeve	Dallas, TX
Martha Marchione	USA	Sales	Open	Santa Clara, CA
APA				
Kiyoshi Yotsukura	Japan	Sales	Open	TKO
-				

Executive Relationships							
Name	Country	Organization	Title/Role	Location			
Russ Gullotti	USA	Americas Terr.	President/Exec. Partner	MKO			
Rita Foley	USA	W. Reg. Sales	Vice President	WRO			
Bill Strecker	USA	Engineering	Vice President	MLO			
Harry Copperman	USA	PC Sales Mktg	Vice President	OGO			
Herb Shumway	USA	DMD CBU	Vice President	MLO			
Fred Traversi	USA	DCS	Director	MLO			
Bill Demmer	USA	Engineering	Vice President	MLO			
Dawn Gilbert	USA	MCS Sales	Vice President	MRO			

Name	Country	Organization	Title/Role	Location
Tom Colatosti	USA	Northeast Reg.	Vice President	NYO
Rick Distasio	USA	DCS Gov't	Vice President	DCO
Bob Burke	USA	DCS	Vice President	OHF
Ron Bohlin	USA	DCS Services	Vice President	MLO
Diane Albano	USA	Aerospace Mktg	Director	OFO
Mike Engbrock	USA	DMD Ind. Seg.	Manager	MRO
Bill Overman	USA	Solut. Bus. Grp.	Manager	SLO
John O'Leary	USA	DOM West. Reg	Director	WRO
Bill Armitage	USA	Embedded Sys.	Director	LJO
Rich Lewan	USA	Embedded Sys.	Manager	LJO
Frank Posey	USA	DOD District	District Manager	DCO
Tony Morris	USA	Gov't Programs	Vice President	COP
Chris Penta	USA	Aerospace Mktg	Program Manager	OFO
Skip Mauser	USA	Aerospace Mktg	Program Manager	IVO
Dan Vertrees	USA	PC Marketing	Manager	WRO
Ed Sorgi	USA	W/S Mktg	Manager	IVO
J.J. O'Leary	USA	Communication	Manager	SEO
Don Armagnac	USA	WRO Ops	Manager	WRO
Jim Colloera	USA	DCS	Vice President	SDO
Pat Lambs	USA	W. Region S/S	Manager	WRO
Charlotte Connelly	USA	W. Region Mktg	Manager	WRO
Linda Hoffmann	USA	US Programs	Manager	MKO
Cindy Sauln	USA	MCS W. Region	District Manager	WRO
Al Hall	USA	Southeast Reg.	Vice President	DCO
David Mitchell	USA	Florida District	District Manager	ORL
Dale Vaughn	USA	Westen Region	GAM/Lockheed	IVO
Lloyd Berry	USA	SE Region Sales	GAM/NASA	DCO
Jim O'Neil	USA	SE Region Sales	GAM/DAG	DCO

#### **Account Plan Summary**

#### 1. Account Overview and Strategy

#### 1.A. Last Year's Action Plan and Status to-Date

- Account FY'94 Performance Very Low As of 3/94 62% YTD Account U.S. Wide
- RCAS Program slipped 16 months = \$8M
- Boeing lost RAAF Program (90% odds to win) = \$5.5M
- CSF Program cancelled in Everett = \$4.1M
- PC Maintenance Program lost = \$9.5M
- USA Client-Server Program Lost to HP = \$7M
- Wireshop Program delayed = \$2.3M
- F22 Program reduced = \$5M
- Data Base Server Program moved to FY95
- METIS implementation much slower
- CATIA view program not accepted = \$1.3M
- Deltapoint WCC Implementation slowed = \$1M

#### 1.B. Critical Changes and Business Trends in the Client Company

Boeing Status CY 1993:

#### Boeing Commercial Aircraft Group (BCAG)

- Sales reduced \$5B 92/93
- Capital Expenditures reduced \$863M = 30%
- · Commercial Airline Industry still in downturn
  - Delivered 330 jetliner's vs. 441 in '92
  - Maintained 71% of World Market despite downturn
  - Major customers delaying delivery
  - Huge 777 development costs/investments
  - Airplane production rates reduced from 32.5 to 23 monthly
  - Contracted Backlog down to \$73.5B from \$87.9B in 1992
  - Downsized 19,000 employees

#### Boeing Defense and Space Group (D&SG)

- Revenues were \$4.4B vs. \$5.6B in 1992
- Reduced B2 Bomber Program impacted revenue
- F-22 Program funding delays impacted revenue
- Won NASA Space Station Prime Contractor Package
- AWACS Business is renewing with 2 orders
- Operating Profit of \$219M, second year of Profit Improvement
- Downsized 3,200 employees

#### **Boeing Computer Services (BCS)**

- RCAS Program funding in question
  - Software development delayed
  - Funding delayed
- Created Boeing Information Services, Inc., to pursue large, complex systems integration programs in government sector
- Reduced all procurements by 30%
- Renegotiated all major supplier maintenance contracts
- Reduced number of suppliers
- Significant Software development / hardware costs in digital design of 777 Aircraft (CATIA)
- Downsized 1,200 employees

#### 1.C. Impact on Digital

- Significant drop in Worldwide Account Revenue in FY'94. Goal: \$47M Forecast: \$30M
- Low morale of Sales/Sales Support organization due to high customer demand and significantly less purchases and orders; reduced compensation leverage
- Downsized Boeing Business Group over 60% (42 personnel) in last 18 months which consisted of:
   7 Managers, 12 Sales Reps, 6 Indirect, 10 DCS, 7 Sales Support

#### 1.D. Digital Business Outlook

- Improving substantially during FY '95/96
- Five Corporate Visits to Digital in FY' 94 have restored Digital to Key Supplier Status

Oct. 1993 - Defense & Space Group

2 V.P.'s, 4 Directors, 6 Managers - Marlboro

Feb. 1994 - Boeing Computer Services

2 Presidents, 4 Vice Presidents, 1 Director - Maynard

Mar. 1994 - Boeing Computer Services / Boeing Commercial Airplane

12 Directors, 2 Senior Managers - Maynard

Results: Significant amount of Action Items. Excellent customer engagement on a number of perspectives. Excellent reception of AXP, OSF, FBE, PC's, and Business Process Reengineering/DCS

Apr. 1994 - MCS Corporate Visit to Marlboro (4/18 - 4/20)

May 1994 - RDB/Object Broker Evaluation Visit - Spitbrook

- Should grow revenue in FY '95/96 by 20% 34% over FY '94 Forecast
- Boeing considers Digital a "major player" once again, one of three key suppliers
- Good opportunities over next 6-18 months in PC's, Workstations, Linkworks, Government Programs, DCS, and FBE's (See 5.C Opportunities Summary)

#### 1.E. Account Team Strategy

#### **Tactical**

- Create a FY'95 Account Strategy that support the following Customer goals:
  - Reduced Cost of Computing
  - Reduced Computer Maintenance by 25%
  - Consolidate Computing Support Initiatives

- Adherence and Adoption of Standards

#### **Account Team Strategy**

- Drive for early program involvement and partnership in large procurements
- Pursue new opportunities for ALPHA
- Grow presence and involvement with BCS Research & Technology for early adoption/approval of Digital products and solutions
- Pursue PC Technology Refreshment Program for BCS and BCAG
- Leverage Business Process Re-engineering interests into DCS engagements
- Grow MCS business in Software and Competitive Maintenance sectors
- Create Digital Visibility Programs via Seminars and DECWest Video Conference Capabilities
- Continue Installed Base Retention/Upgrade Program

#### **Enabling Activities**

- Maximize positive Customer Visit experiences and results
- Convert Action Items and follow-up activities into forecasted business opportunities
- Continue to optimize both Technical Partner (David Hartzband) and Executive Partner (Russ Gullotti) to drive specific business opportunities as well as maintain and grow Executive relationships
- Continue innovative and creative Marketing Programs to secure business
- Maintain and grow positive Executive Relationships between GAM and Boeing Executives
- Utilize Aerospace Marketing, Western States Sales Organization and Other Digital resources in Boeing
- Continue Quarterly Technology Reviews

#### 1.F. Action Plan

- EMPLOYEE RECOGNITION AND MORALE IS THE TOP PRIORITY DAILY, MONTHLY, and QUARTERLY US Recognition Programs
  - Regional Recognition
  - Account Recognition Program
- Secure FY'95 Account Plan Approval
- Provide Letters of Understanding (LOU's) to all responsible Digital personnel linked to Account success in FY'95 within and outside of Core Team
- Develop a aggressive, but achievable budget
- Create a balanced resource plan equal to budget goal attainment

## **Management Information**

#### 2.A. Opportunities Summary

See Section 5 for detail on these opportunities

#### 1. Reduce Computing Costs

- 1.1 File Server
- 1.2 Multivendor Customer Service
- 1.3 Boeing D&SG Manufacturing
- 1.4 BSS Classified Document Tracking System Upgrade
- 1.5 Boeing D&SG Finance System
- 1.6 Supplier Network/EDI

#### 2. Implement Business Process Re-engineering

- 2.1 METIS
- 2.2 DM2000
- 2.3 Renton Doors Project

#### 3. Win New Programs

- 3.1 Reserve Component Automation System (RCAS)
- 3.2 AirBorne, Warning & Control System (AWACS)
- 3.3 F-22 Advanced Tactical Fighter (ATF)
- 3.4 Treasury Communications System Program (TCS)
- 3.5 Space Station Program (SSP) / NASA
- 3.6 Service Center Support System / Telecommunications Acquisition (SCSS)/(TA) IRS Program
- 3.7 AirBorne Laser (ABL) Program

#### 4. Develop Common Architecture via Standards

- 4.1 OSF USA Evaluation
- 4.2 Boeing Groupware Architecture

#### 2.B. Major Events

Date	Event Description	Location	Account Team Member Responsible
Q1	Technology Review	Virginia	Bob Eliot/Toby Arnold
Q1	Technology Review	Texas	Maylon Zerbe/Toby Arnold
Q2	Technology Review	Alabama	Pam Shields/Toby Arnold
Q2	Technology Review	Pennsyl.	Joe Batista/Toby Arnold
Q3	Technology Review	Kansas	Mike Supple/Toby Arnold
Q1,Q3	Russ Gullotti Executive Visit	Seattle	J. Robert Tassone
Q1-Q4	Rita Foley Executive Visit	Seattle	J. Robert Tassone
July	CXO Tour	CXO	Robert Holmes
July	Rdb/NASA Exchange	TBD	Bill Ballentine
Q1 - Q4	Technology Exchange - David Hartzband	BCS/WA	John Drenguis
August	OSF/1 Day	BCS/WA	John Drenguis
September	Real Time/Alpha Day	BCAG	Debra Wieland
September	Storage Works Day	TBD	D.Wieland/S. Petersen
October	Top Gun	TBD	Jim Bocinsky
October	ALPHA SBC Event	D&SG	Al Morgan/ Al Crowder
November	Corporate Visit	GMA	R. Tassone/P. Smith
January	EDI Round Table Forum	TBD	Debra Wieland
January '95	Client/Server Seminar	Vienna	Bob Eliot/Toby Arnold
February	Dallas Consulting Center Visit	Dallas	Debra Wieland
February	AIA CALS	TBD	Dick Parr/Peyton Smith
March	AIA ITC	TBD	Kevin Lewis/Peyton Smith
October	Space Expo '94	Houston	Maylon Zerbe/Toby Arnold
April	Space Congress	Cocoa Beach	Jan Garavano/Toby Arnold

Where appropriate, each of these events would be sponsored by the Boeing Account Team, the local sales district, and Aerospace and Corporate Industry Marketing. Digital technologies, MCS, DCS, and key third party reseller solutions would be demonstrated. Each event would be 1-2 days in length. Both corporate and local resources would be required.

#### 2.C. Customer Satisfaction

#### 1. Most significant customer concerns and issues

- Digitals Long term commitment to:
  - OSF/1
  - Rdb
  - Embedded Solutions
- D1-9001 Quality adherence/support
- Boeing key suppliers ability to reduce costs



Account Plan 17-Apr-94

#### 2. Major decisions and corrective actions

- Fully maximize Technical Partner (David Hartzband) involvement to affirm long term commitments
- Maintain current participation AQS Symposium with Boeing Computer Services
- FY'95 DC "Capabilities Visit" Gresh Brebach, Fred Traversi
- Successful FY'94 Corporate Visits (5) began to address Digital/Boeing Customer Satisfaction issues
- Continue to supply customer with cost reduction proposals as a key element of solicited/unsolicited proposals

#### 2.D. Key Dependencies

(Input to Management, Marketing and Engineering)

#### 1. Resources

- Discrete Manufacturing Business Unit Support
- Aerospace Marketing Support
- Software Engineering Support
- Contracts/Administrative Support
- Legal Support
- Proposal Support
- Technical Engineering Assistance
- Business Operations
- Sales Support Skills in:

Open VMS, OSF/1 Rdb, Linkworks Object Broker, DBI, Forte, FBE Realtime/Embedded Solutions

#### 2. Solution sets

- Polycenter/Netview
- LinkWorks
- CohesionworX
- AccessWorks
- Storageworks
- Pathworks
- Mentor Graphics/Apollo migration to ALPHA Program (Full Suite)
- DECsafe
- Full Sail
- OSF/1 SMP
- OSF/1 Fault Tolerance

#### 3. Products

- UNIX
- OSF/1
- GOSIP Certification
- Open VMS
- Servers
- Worksystems



- PC's
- Networks
- Gigaswitch
- Compilers (Ada, C++, FORTRAN+)
- Security (CMW MLS+)
- Database Management Tools
- Ada Compiler for VX Works
- Ada Support for DECelx
- ALPHA SBC with robust support suite

#### 4. Applications

- Teamlinks/EDI/All-In-One
- ASD/SEE
- Team/SEE
- CASE
- MAILbus
- Technical Publications
- Embedded Solutions
- Third Party Products
- METIS
- SQL Tools for Rdb
- ASK Man/Man X

#### 5. Digital Consulting

- Business Process Re-engineering Support
- Sub-contracted Technical Resources to Boeing
- LinkWorks Consultants
- METIS Consultants
- FBE Consultants
- SEI/CMM2 Rating Requirements

#### 6. MCS

- Multi-vendor Services
- Software Asset Management
- DECmove Services

#### 7. Other Issues (e.g. Pricing, Legal, Travel, etc.)

- Proposal Resources
  - Legal, contracts, pricing, technical support, technical publications, etc..

## **Financial Information**

#### 3A. Five Year Revenue and Resource Plan

	FY92	FY93		FY94		FY95		FY96	
	Actual	Actual	93/92 %	Fcst	94/93 %	Plan	95/94 %	Plan	96/95 %
Revenue (NOR in K\$)									
Direct	27200	11699	-57%	7500	-36%	10226	36%	14050	37%
Indirect	6700	1945	-71%	1200	-38%	2800	133%	4010	43%
NOR Product	33900	13644	-60%	8700	-36%	13026	50%	18060	39%
Digital Consulting	16100	3800	-76%	2650	-30%	3200	21%	3400	6%
MCS	18500	21000	14%	18900	-10%	20050	6%	20800	4 %
NOR Service	34600	24800	-28%	21550	-13%	23250	8%	24200	4%
Total Revenue NOR	68500	38444	-44%	30250	-21%	36276	20%	42260	16%
Leveraged Business						1			
Impacted Business	68500	38444	-44%	30250	-21% (	36276	20%	42260	16%
Resources (effort Years)									
Acct. Team - Sales	31	26	-16%	16.5	-37%	12.8	-22%	16.0	25%
Acct. Team - Support	20	14.1	-29%	7.0	-50%	5.9	-16%	7.0	19%
Acct. Mgt.	1	2	100%	2.0	0%	2.0	0%	2.0	0%
Total Selling Effort	52	42.1	-19%	25.5	-39%	(20.7)	-19%	25.0	21%
Other Resources									
Total Resources	52	42.1	-19%	25.5	-39%	20.7	-19%	25.0	21%
Rev/Head (\$K)	1317	913	230%	1186	30% (	1752	48%	1690	-4%
Other Expenses (\$K)	150	200	0%	150	0%	200	0%	200	0%

Revenue/Head = Total Revenue NOR / Total Selling Effort Sales & Support Resources = Assigned, named resources in Account Team Other Resources = Unassigned, used from Service Support Center Other Expenses = Non-people related



#### 3.B. Revenue by Business Unit and Territory - FY95

Primary Business Unit: Discrete Manufacturing

Business Unit: Discrete Mfg.  1. USA  2. UK/Ireland - (A)  3. France - (B)  4. Germany & Others - (C)  5. Nordic & Others - (D)  6. Italy, CDG - (E)  7. ASIA  8. Canada	35576 250	20.2	200
2. UK/Ireland - (A) 3. France - (B) 4. Germany & Others - (C) 5. Nordic & Others - (D) 6. Italy, CDG - (E) 7. ASIA			200
3. France - (B) 4. Germany & Others - (C) 5. Nordic & Others - (D) 6. Italy, CDG - (E) 7. ASIA	250	.2	
4. Germany & Others - (C) 5. Nordic & Others - (D) 6. Italy, CDG - (E) 7. ASIA		A	
5. Nordic & Others - (D) 6. Italy, CDG - (E) 7. ASIA			
6. Italy, CDG - (E) 7. ASIA		1 -	
7. ASIA			
7. ASIA			
8 Canada	300	.2	-
o. Carraua	150	.1	-
9. Japan			
10. LACT			
11. South Pacific			
Total Bus. Unit ABC	36276	20.7	200
	<b>—</b>		
	+	+	
	+	+	+
		+	-
	-	-	
	+	1	
	1		19

#### 3.C. Financial Summary FY94 and FY95

FY94	Direct Sales	Indirect Sales	MCS	Total
	(Products & DC)			
Gross Revenue (\$K)	13093	1720	20860	35673
Disc. / Allowances	2943	520	1960	5423
(\$K)				
NOR (\$K)	10150	1200	18900	30250
Selling Effort (yrs.)				25.5
Other Expenses				150
(\$K)				

FY95	Direct Sales	Indirect Sales	MCS	Total
	(Products & DC)			
Gross Revenue (\$K)	15335	4026	22128	41489
Disc. / Allowances	1909	1226	2078	5213
(\$K)				
NOR (\$K)	13426	2800	20050	36276
Selling Effort (yrs.)				20.7
Other Expenses				200
(\$K)				

## **Account Review Decision Summary**

Date:

4/27/94

Location:

Santa Clara, Ca WRO-1

#### 4.A. **Review Board Attendees**

Chairman: Herb Shumway

Secretary:

#### Attendees:

- Rita Foley, Western States V.P.
- Malcom Jones, Boeing CSP, V.P.
- **DMD Staff**
- Cindy Sauln, MCS
- David Finkel, DC
- Dan Vertrees, PCBU
- Toby Arnold, Boeing SAM
- Dick Nehr, MCS
- John Magnusson, Boeing PMO
- Chris Penta, Aerospace Marketing

#### 4.B. **Minutes**

#### **Account Team Proposal**

- <>
- <>

#### **Review Board Decisions**

- <>
- <>
- <>

#### 4.C. **Approvals**

Name

Position

Date

Signature

## **Account Plan Detail**

#### 5. Customer Business Challenges and Business Opportunities

Section 2A contains a listing of the all the Customer Business Challenges and Business Opportunities

#### 1. Reduce Computing Costs

#### 1.1 FILE SERVER (BCAG)

- Description
  - -Fault tolerant storage system for large engineering communities in Client/Server environment
- Value for Customer
  - -Vendor independence
  - -FAA Regulation Adherence
  - -Low cost
- Solution Process
  - -DECsafe
  - -Dual 7610's OSF/1
  - -Storage Works solution
- Action plan and milestones
  - -Phase 1 current equipment upgrade
  - -Executive Briefings
  - -Proof of concept
- Critical success factors
  - -Product availability
  - -DEC support of OSF/1
  - -Continued Boeing Management Support
- Risks and Dependencies
  - -HP political bias
- Projects
  - -Storage Works presentations/demos
  - -Engineering visit
- Revenue/Resource/Expense Summary
  - -\$2.0M

#### 1.2 MULTIVENTOR CUSTOMER SERVICES

Description

Boeing must reduce maintenance costs while retaining quality service levels

• Value for Customer

Hardware Maintenance (HPS)

-Silicon Graphics, Inc.	\$ 600K/yr
-Prime/Computervision	\$ 1000K/yr
-Intergraph	\$ 200K/yr
-IBM (RS6000 Base)	
-IBM (AS400 Base)	
-Expand Current WS Base	

-RCAS - Increased Support \$ 50K/yr -Spares/DAS Support (D&SG) \$ 100K/yr -New Boeing Program Wins \$ 150K/yr

**Software Product Services (SPS)** 

-Reduce Boeing's software administration costs utilizing Digitals Software

Asset Management Program

\$ 150K/yr

- Solution Process
  - -Corporate Visits with Boeing Computer Services Management
  - -Weekly MCS Sales Calls
  - -Proposals
- Action plan and milestones
  - -Q4/FY94 Corporate Visit
  - -MCS Red Team Proposal Review
  - -Q2/FY95 MCS "Services" Day
- Critical success factors
  - -99% + availability on current Multi-Vendor Workstations Maintenance contract (4000+ units)
  - -Successful Corporate Visit
  - -Boeing Procurement/End User support
- Risks and Dependencies
  - -Boeing Management/Employee Attrition
  - -Competition GE/IBM/Bell Atlantic
  - -Pricing
- Projects
  - -See "Solution Process"

- Revenue/Resource/Expense Summary
  - -Potential FY95/96 New Business Revenue = \$1-2M
  - -Resources include:
    - -MCS Sales Management
    - -MCS Business Operations
    - -Proposal Personnel
    - -Contracts & Administration
  - -Expense Summary
    - -Resources Above
    - -Travel
    - -Misc

### 1.3. D&SG MANUFACTURING

- Description
  - -Provide Client/Server based integration service connecting Engineering and Manufacturing data systems
- Value for Customer
  - -Lower support cost
  - -Faster delivery
  - -Minimal investment
- Solution Process
  - -Evaluate technology
  - -Test Technology -Pilot
  - -References
- Action plan and milestones
  - -Demo
  - -Factory visit
  - -Proof-of-concept
- Critical success factors
  - -Technical Sales Support FBE
  - -Digital Consulting Support BPR, Mgt. Consulting
- · Risks and Dependencies
  - -Funding
  - -Timeframe
  - -Competition
- Projects
  - -FBE Demo & Hands on
  - -Pilot proposal
- Revenue/Resource/Expense Summary
  - -Pilot Test \$30-40K 2 people
  - -Implementation \$250K 6-9 month cycle

### 1.4. BSS CLASSIFIED DOCUMENT TRACKING SYSTEM UPGRADE

### Description

- -The classified document tracking system was put in place to track "Boeing Classified" documents within the Boeing Company.
- -The system tracks and reports on all Boeing Classified documents within the company
- -The software used to track the documents is written in VMS and is currently running on a VAX 6420

### • Value for Customer

- -The proposed plan would allow the customer to migrate to new technology for the same amount of money they are currently spending to maintain the existing technology
- -The TMMS plan will allow the customer to refresh their technology every two, three, or four years depending on preference
- -Since TMMS can be cancelled after one year, it can be treated as an operating expense, not a lease or a purchase

### Solution Process

- -Sell the customer on Hamilton Avnet and the TMMS program for acquiring technology
- -Present current technology that makes sense to the customer, such as; the VAX 4000 model 600
- -Show the customer disk performance statistics that favor Digital when compared to MTI

### Action plan and milestones

- -Executive meeting with Director of Computing for Boeing Support Services
- -Executive presentation with the head of Procurement for The Boeing Company
- -TMMS presentation to the Finance group at Boeing

### • Critical success factors

- -Work closely with Hamilton Avnet to present TMMS program
- -Boeing must accept TMMS as a way of doing business
- -The upgrade that is presented must make sense to the Classified Document Group

### Risks and Dependencies

- -TMMS must be accepted by Boeing
- -The customer must agree to the proposed technology
- -We must show the customer that Digital Drives are competitive with MTI drives

### Projects

- -Not applicable
- Revenue/Resource/Expense Summary
  - -Revenue of approximately 100K
  - -TMMS (Hamilton Avnet) expert is the needed resource

### 1.5. BOEING D&SG FINANCE SYSTEMS

### • Description

Provide Client/Server User Front End to Finance Legacy Systems

- Value for Customer
  - -Faster delivery of App's
  - -Application development time cut
  - -Vendor independence
- Solution Process
  - -Object Oriented Presentation
  - -Product demo
  - -Pilot engagement
- Action plan and milestones
  - -Presentations now
  - -Demo & factory visit 5/1/94
  - -Pilot start June
- Critical success factors
  - -Delivery personnel
  - -Demo capability
  - -Marketing
- Projects
  - -Modeling demo
  - -Unsolicited proposal
  - -FBE demo
- Revenue/Resource/Expense Summary
  - -Pilot 30K / 1 delivery person
  - -Implementation phase \$100K
  - -3 people 6 month cycle

### 1.6. SUPPLIER NETWORK/EDI (BCAG)

- Description
  - -State of the art EDI network for top BCAG suppliers
- Value for Customer
  - -Provide EDI in support of MRP, JIT, Customer satisfaction, and reduced costs
- Solution Process
  - -Consulting
  - -Upgrades/add-on's
- Action plan and milestones
  - -On-going sales dialogue & presentations
  - -Executive Briefings
- Critical success factors
  - -Continued Boeing management support
- · Risks and Dependencies
  - -Continued acceptance of VMS

- Projects
  - -EDI Industry Round Table Forum
- Revenue/Resource/Expense Summary
  - -\$1.7M- Products & Service

### 2. Implement Business Process Re-engineering

- 2.1. METIS (BCAG)
- Description
  - -Provide a suite of Process Modeling Tools to facilitate BCAG's division-wide BPR
- Value for Customer
  - -Consistent tool for use across Boeing
  - -Highly functional
  - -Decision maker developers all use same tool
  - -Use existing hardware
- Solution Process
- Action Plan and Milestones
  - -Pilots End User, Q1
  - -Pilots Technology Q1
  - -Corporate License Q3
- Critical success factors
  - -End User acceptance
  - -Front end more user friendly
  - -Simulation capability
- Risks and Dependencies
  - -Timing-Boeing acceptance vs needs
  - -Pilots successful
  - -Technology improvements: Front End, PC, Simulation
- Projects
- Revenue/Resource/Expense Summary
  - -Pilots 51K per pilot
  - -102K per pilot
  - -\$1M
  - -End User Pilot 2 Programmers & Consultants per project 1 month
  - -Technology Pilot 2 Programmers DEC, 1 Programmer METIS

### 2.2. DM2000 (D&SG)

- Description
  - -Centralized engineering data management and business process repository functionally accessible to engineering community
- Value for customer
  - -Streamlined processes
  - -Maintenance savings
  - -Eliminate Legacy Systems
  - -Eliminate Legacy People
- Solution Process
  - -Normalize enterprise data
  - -Embedded applications and processes
  - -Migrate to object based systems
- Action plan and Milestones
  - -Solve current Rdb problems 5/94
  - -Object Broker visit 4/94
  - -ALPHA benchmark 6/94
- Critical success factors
  - -Rdb expert local
  - -Rdb 6.0 bug free
  - -Continued Hartzband involvement
- Risks and Dependencies
  - -Rdb Engineering must be right
- Projects
  - -Consultant on site
  - -Hartzband visits
- Revenue/Resource/Expense Summary
  - -\$2-5M revenue over 2 years
  - -\$20 M after FY'96

### 2.3. RENTON DOORS (BCAG)

- Description
  - -MFG Process Control
  - -Simple, easy to use
  - -BCAG Architecture Standards
- Value for Customer
  - -Speed of Implementation
  - -Quick functionality
  - -MFG knowledge & expertise
- Solution Process

- · Action plan and milestones
  - -SPIN customer needs
  - -Pilot in September
- Critical success factors
  - -Keep below BCAG/BCS radar
  - -Cheap, easy solution
  - -Functionality fit
- · Risks and Dependencies
  - -Corporate direction of Boeing
    - -Customers budget
  - -BCS Radar
- Projects
- Revenue/Resource/Expense Summary
  - -100K Revenue
  - -MFG consultant 2 months

### 3. Win New Programs

### 3.1 RESERVE COMPONENT AUTOMATION SYSTEM (RCAS) PROGRAM (BCS)

- Description
  - -The RCAS Program was awarded to Boeing Information Services, Inc. In January, 1992. The life of the RCAS Program has now been extended to 2005. RCAS will provide information systems for the US Army Reserve and National Guard. Information systems to be provided include Personnel Administration, Operations Training and Tracking, Logistical Management, and Management Systems Reporting. RCAS will be deployed to over 4000 sites in CONUS.
- Value to Customer
  - -\$1.8 Billion (Program Life)
  - -Value to Digital = \$100M Program Life
- Solution Process
  - -Boeing to purchase ALPHA migration from MIPS ULTRIX/CMW MLS+ based systems
  - -Boeing to execute this technology insertion into the RCAS deployment schedule prior to CY95
  - -Personal Computer Opportunity to replace Zenith (15,000 Units over 10 years)
- Action plan and milestones
  - -Digital RCAS Program Management Office established January, 1992
  - -Weekly meetings with Boeing Management and staff
  - -Quarterly Program Management Reviews
  - -Technology insertion proposals, as required
  - -Technology Reviews, Semi-Annually
  - -Personal Computer RFP due 4/22/94

- Critical success factors
  - -Increased Congressional funding for RCAS Program
  - -Successful deployment of initial systems '92-'95
  - -Reduced deployment costs
  - -Clean Digital migration plan from MIPS to ALPHA
  - -MIPS to ALPHA compatibility (Backward/Forward)
  - -PC Pricing, Quality, Support Plan, and Delivery
- Risks and Dependencies
  - -Renewed aggressive support from Congress GFY'95
  - -Increased performance to support MIPS to ALPHA migration
  - -Internal DCS management support of Digital PMO
  - -Lack of aggressive response by Digital PCBU and MCS
- Projects
  - -PC Proposal
  - -Technology Insertion Proposals
  - -MCS Proposals
  - -DCS Proposals
  - -Third Party Software
- Revenue/Resource/Expense Summary
  - -Lifetime Digital Revenue Potential = \$100M
  - -Resources Required
  - -Digital RCAS PMO
  - -Sales
  - -Sales Support
  - -Industry Marketing
  - -Business Unit
  - -Proposal Team support
  - -Contracts/Legal
  - -Software Engineering
  - -Expenses: Above resources

Travel

Meetings, events, etc..

### 3.2. 767 AWACS (D&SG)

- Description
  - -System support for next AWACS generation, both onboard and ground based
- Value for Customer
  - -Platform independence
  - -S/W investment protection
  - -Re-use
- Solution Process
  - -ALPHA SBC solutions
  - -DECelx for Ada
  - -Runtime libraries
- Action plan and milestones
  - -DEC/Raytheon Milspec sessions

- -On-going sales dialogue & presentations
- Critical success factors
   -DEC support for embedded solutions
- Risks and Dependencies
   Boeing AWACS people have IBM bias
- Projects-Common Console (display)
  - **-767 AWACS**
- Revenue/Resource/Expense Summary -\$1.8M

### 3.3. F-22 MIGRATION (D&SG)

- Description
  - -Migrate F22 Software to Open VMS or OSF/1
- Value for Customer
  - -Lower computing costs
  - -Easy upgrades to ALPHA
- Solution Process
- Action plan and milestones
  - -Lockheed/Georgia PMO to create opportunity for upgrade
- Critical success factors
  - -Lockheed/Georgia Authority to proceed
- Risks and Dependencies
  - -Prerequisite software available
- Projects
- Revenue/Resource/Expense Summary -\$1.5M

### 3.4. TREASURY COMMUNICATIONS SYSTEM (TCS) PROGRAM (BCS)

- Description
  - -TCS will provide for a C2 level secure data network to the US Treasury Department. Initially the Treasury will connect 5 sites. Digital's solution must be OSF/1 GOSIP compliant (FIPS 146-X) using our Polycenter Netview/MAILbus products.
- Value for Customer -\$100M



Account Plan 17-Apr-94

- Solution Process
  - -Digital is bidding MAILbus Technology
- Action plan and milestones
  - -Based upon U.S. Department of Treasury bid processes
- Critical success factors
  - -Boeing Solution must be chosen for the BAFO bid
- Risks and Dependencies
  - -Technical Solution must meet/exceed Treasury (TCS) specifications and contain competitive pricing
- Projects
  - -Ongoing commitment to OSF/1 GOSIP compliance via Digital Product Management
- Revenue/Resource/Expense Summary
  - -Lifetime Digital Revenue = \$2-3M
  - -Digital resources to be supplied by the local sales district
  - -Expenses to Boeing Account team:

1 Sales

1 Sales Support

**Software Engineering Support** 

**Industry Business Unit Support** 

**Proposal Resources** 

Travel

### 3.5. SPACE STATION PROGRAM (SSP) - (D&SG)

- Description
  - -NASA Space Station Program (SSP) prime contract was awarded to Boeing Defense & Space Division in the Fall of 1993. Boeing will be responsible for the design, development, physical and analytical integration, testing, delivery, and launch of the space station.

Total SSP Program Value = \$22B (Lifetime)

- Solution Process
  - -Sell to Digitals strength in NASA and Boeing
  - -Create demand for Digitals ALPHA Generation, CASE, Data Base, Networks, and Services products within Boeing's SSP PMO
- Action plan and milestones
  - -Semi-annual International Space Station Team meetings with key NASA/Boeing and Digital personnel
  - -Quarterly Technology Reviews
  - -Executive Visits
  - -Reference Sales (F22 Program & NASA)
- Critical success factors
  - -Digital reputation for support on complex, long term government programs
  - -Availability of key product technologies required by NASA/Boeing on SSP
  - -Digital investment strategy

- Risks and Dependencies
  - -Continued Congressional Funding of Space Station Program
  - -NASA/Boeing commitment to Digitals Client/Server Architecture on OSF/1
  - -Competition from HP, IBM, SGI, SUN
- Projects
  - -Sales calls
  - -Account references
  - -Technology Days
  - -Space exhibitions
- Revenue/Resources/Expense Summary
  - -Projected Revenue to Digital FY95/96 =\$2-3M
  - -Resources will include, but are NOT limited to:

Sales (Product, DC, MCS, PCBU, Storage, etc..)

Sales Support
Executive Visits
Corporate Marketing
Industry Marketing
Software Engineering

Hardware Engineering

**Proposal Teams** 

**Contracts and Administration** 

-Expense Summary

All resources above, plus travel, misc.

### 3.6. SERVICE CENTER SUPPORT SYSTEM / TELECOMMUNICATIONS ACQUISITION IRS PROGRAM (SCSS/TA) - (BCS)

- Description
  - -The SCSS/TA Program is sponsored by the Internal Revenue Service (IRS), a Division of the US Treasury Department. SCSS/TA will provide three (3) or more secure, gateway front end systems for each of the IRS Service Centers, allowing intrafacility communications management. The program functionality will include data storage, retrieval, and processing capability for a security audit trail. It will provide a secure integrated network management system to be used by IRS Service Center network support personnel, as well as providing secure access for IRS end user applications.
- Value for Customer
  - -\$150M
- Solution Process
  - -Sell Boeing on the use of Digital Technologies
- Action plan and milestones
  - -Weekly telecon with customer
  - -Monthly technology updates
  - -IRS timetable for RFP
- Critical success factors
  - -Digital must commit to OSF/1 GOSIP compliance on our MAILbus products

- -Boeing must bid SCSS/TA
- -Boeing must bid with Digital
- -Boeing solution must be chosen for BAFO
- -Boeing must win BAFO
- Risks and Dependencies
  - -Boeing technical solution must meet/exceed IRS RFP
  - -Boeing prices must be competitive
  - -Boeing must win BAFO
- Projects
  - -Technology Days
- Revenue/Resource/Expense Summary
- -Lifetime Digital Revenue Potential = \$5-10M
  - -Digital Resources Required: Local Sales

Sales Support

Software Engineering Proposal Support Technical Support

-Expense Summary: Above resources

Travel Meetings

### 3.7. AIRBORNE LASER (ABL) PROGRAM (D&SG)

- Description
  - -Support of ABL Development Lab with Team/SEE and ALPHA AXP for Engineering Lab
- Value for Customer
  - -Long term solutions 15+ years.
  - -Will require many compute cycles on the 747 for the prototype
- Solution Process
  - -ALPHA is full line Boards, W/S, Server
  - -COTS
  - -Business partners in Aerospace
  - -Processing power needed
- Action plan and milestones
  - -Propose Team/SEE for Program
- Critical success factors
  - -Align with AF requirements
  - -COTS in proposal
  - -Full Team agreement (TRW-Lockheed)
- Risks and Dependencies
  - -Boeing must win ABL
  - -Investment by Digital

- Projects
  - -Become solutions Architect for Computing on program
- Revenue/Resource/Expense Summary
  - -\$200K FY95
  - -\$150K FY96
  - -\$150K FY97
  - -\$5-10M FY98

### 4. Develop Common Architecture via Standards

### 4.1. OSF USA EVALUATION (BCS)

- Description
  - -Architecture review evaluation of OSF/1 for coexistence with HP, SUN, and IBM
- Value for Customer
  - -A UNIX alternative to HP
- Solution Process
  - -OSF/1 submitted for evaluation by USA
- Action plan and milestones
  - -Formal architecture
  - -Review Q2 FY'95
- Critical success factors
  - -OSF functionality
  - -Oracle performance
  - -Networking elements client/server access
- Risks and Dependencies
  - -Boeing may not want another vendor that is USA compliant
- Projects
  - -Technical services currently evaluating OSF
- Revenue/Resource/Expense Summary
  - -Strategic opportunity
  - -Revenue TBD
  - -20% of sales support person for 3 quarters

### 4.2 BOEING GROUPWARE ARCHITECTURE (BCS R&T)

- Description
  - -Evaluation of LinkWorks / Reliable Flow Manager (RFM) products as possible components of Boeing's Groupware Architecture
- Value for Customer
  - -Provide Boeing with a consistent groupware architecture throughout divisions

- Solution Process
  - -LinkWorks /RFM pilot at BCS R&T
- Action plan and milestones
  - -Q1 LinkWorks Pilot
  - -Q2 LinkWorks Implementation
- Critical success factors
  - -Viability of LinkWorks at enterprise level
  - -Success of pilot
- Risks and Dependencies
  - -Trained / experienced LinkWorks consultants
  - -Stability / features availability of LinkWorks product
- Projects
  - -LinkWorks pilot
- Revenue/Resource/Expense Summary
  - -\$20K Pilot
  - -\$250K LinkWorks Licenses
  - -LinkWorks knowledgeable sales support consultant

### 5.B On-going and Other Business Challenge

- Description
- -
- Revenue/Resource/Expense Summary

### 5C. Opportunities Summary By Customer Business Challenge

	FY94			FY95				FY96			
	Rev.	Res.	Other	Rev.	NOR	Res.	Other	Rev.	NOR	Res.	Other
	NOR	Eff.	Exp.	NOR	95/94	Eff.	Exp.	NOR	96/95	Eff.	Exp.
-	\$K	Yrs.	\$K	\$K	%	Yrs.	\$K	\$K	%	Yrs.	\$K
Opp. 1.1	0	0.4	0	2000	ERR	0.5	0.0	1000	-50%	.2	0
Opp. 1.2	0	0.0	0	1000	ERR	0.2	0.0	1500	50%	.2	0
Opp. 1.3	0	0.2	0	250	ERR	0.2	0.0	400	60%	.2	0
Opp. 1.4	0	0.1	0	100	EER	0.1	0.0	400	300%	.2	0
Opp. 1.5	0	0.1	0	100	EER	0.1	0.0	250	150%	.1	0
Opp. 1.6	50	0.2	0	1750	3400%	0.6	0.0	1500	-14%	.5	0
First	50	1.0	0	5200	10300	1.7	0.0	5050	-3%	1.4	0
Customer					70						
Business					-						
Challenge											
0.01		0.1		1000	EDS	0.1	0.0	1000	0~		
Opp. 2.1	0	0.4	0	1000	ERR	0.6	0.0	1000	0%	.4	0
Opp. 2.2	200	0.1	0	2000	900%	0.6	0.0	1000	-50%	.4	0
Opp. 2.3	0	0.1	0	100	ERR	0.2	0.0	250	150%	0	0
					11500						0
Second	200	0.6	0	3100	1450%	1.4	0.0	2250	-27%	.8	0
Customer											
Business											
Challenge											
Opp. 3.1	4000	0.5	0	5000	25%	0.5	0.0	8000	60%	.5	0
Opp. 3.1	80	0.3	0	1800	2150%	0.6	0.0	1500	-17%	.5	0
Opp. 3.2	300	0.4	0	1500	400%	0.5	0.0	1500	0%		0
Opp. 3.4	0	0.4	0	500	ERR	0.3	0.0	500	0%	.3	0
Opp. 3.4 Opp. 3.5	0	0.5	0	1000	ERR	0.5	0.0	2000	100%	.5	0
Opp. 3.6	0	0.3	0	0	ERR	0.3	0.0	500	ERR	.3	0
Opp. 3.7	0	0.0	0	200	ERR	0.3	0.0	400	100%	.2	0
Орр. 3.7	0	0.0	0	200	EKK	0.2	0.0	400	100%	.2	U
Third	4380	2.2	0	10000	ERR	2.9	0.0	14400	ERR	2.7	0
Customer											
Business											
Challenge						-					
Opp. 4.1	0	0.1	0	100	ERR	0.3	0.0	500	400%	.2	0
Opp. 4.2	0	0.0	0	250	ERR	0.2	0.0	500	100%	.2	0
Fourth	0	0.1	0	350	ERR	0.5	0.0	1000	186%	.4	0
Customer											
Business											
Challenge											
Total	4630	3.9	0	18650	302%	6.5	0.0	22700	22%	5.3	0
Opportunities											

### 5D. Opportunity Revenue/ Resources/ Expense by Area/Territory

		FY94			FY	795		FY96			
	Rev. NOR \$K	Res. Eff. Yrs.	Other Exp. \$K	Rev. NOR \$K	NOR 95/94 %	Res. Eff. Yrs.	Other Exp. \$K	Rev. NOR \$K	NOR 96/95 %	Res. Eff. Yrs.	Other Exp. \$K
UK/Ireland - (A)				250		.2		300	20%	.2	
France - (B)											
Germany & Others - (C) Nordic & Others -											
(D) Italy, CDG - (E)											
Europe Total											
USA Total	30250	25.5	200	35576	18%	20.2	200	39645	11%	24.5	200
ASIA				300	N/A	.2		300	67%	.2	
Canada				150	N/A	.1		300	100%	.1	
Japan											
LACT											
South Pacific											
APA											
World	30250	25.5	200	36276	20%	20.7	200	40545	12%	25.0	200

### **Account Budget**

### 6.A. Revenue by Territory - FY94 & FY95

	Products	(Direct &	Indirect)	Service	es (DC &	MCS)		Total	
NOR \$K	FY94	FY95	95/94	FY94	FY95	95/94	FY94	FY95	95/94
	Fcst	Plan	%	Fcst	Plan	%	Fcst	Plan	%
UK/Ireland - (A)	0	250						250	
France - (B)									
Germany & Others - (C)									
Nordic & Others - (D)									
Italy, CDG - (E)									
Europe Total			-						
USA Total	8700	12326	42%	21550	23250	8%	30250	35576	18%
ASIA	0	300	+					300	
Canada	0	150						150	
Japan									
LACT									
South Pacific									
APA									
World	8700	13026	50%	21550	23250	8%	30250	36276	20%

### 6B Resources by Territory - FY94 & FY95

	S	ales	Sup	pport	Accou	int Mgt.	Total	Selling	Rev.	/Head	Other R	Resources
Effort Years	FY94 Fcst	FY95 Plan										
UK/Ireland - (A)	0	.2	0	0	0	0	0	.2	0	1250	0	0
France - (B)												
Germany & Others - (C)												
Nordic & Others - (D)												
Italy, CDG - (E)												
Europe Total												
USA Total	16.5	12.3	7.0	5.9	2	2	25.5	20.2	1186	1761	0	0
ASIA	0	.2	0	0	0	0	0	.2	0	1500	0	0
Canada	0	.1	0	0	0	0	0	.1	0	1500	0	0
Japan												
LACT										1		
South Pacific												
APA Total							-			-	-	-
World	25.5	20.7	7.0	0	2	2	25.5	20.7	1186	1752	0	0

6C. Products & Services Mix, Discount and Allowances

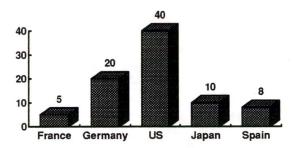
FY95	NOR %	NOR \$K	Discount \$K	Allowance \$K	Total \$K
Vax Syst./Serv	5%	651	80	20	751
Vax Workst.	5%	651	156	23	831
MIPS Sys/Serv	15%	1954	645	98	2696
Alpha Sys/Ser	15%	1954	645	50	2649
Alpha Workst.	10%	1303	261	36	1599
Alpha PC's	2%	261	0	76	337
Intel PC's	2%	261	24	0	285
Other	2%	261	34	10	305
Storage	10%	1303	0	234	1537
Components	5%	651	0	53	704
Memory	5%	651	0	219	870
Software	10%	1303	160	50	1513
Third Party	10%	1303	0	35	1338
Unknown	4%	521	57	0	578
Total Prod.	100%	13026	2062	904	15992
Management & IT Consulting	35%	1120	0	0	1120
Application/ Technology	56%	1792	100	0	1892
Learning Services	2%	64	2	0	66
Network Integration Services	4%	128	10	0	138
System & Network Operations	3%	96	3	0	99
Custom Systems	0%	0	0	0	0
Total DC	100%	3200	115	0	3315
Hardware Product Serv.	69%	13835	150	1600	15585
Software Pdt. Services	25%	5013	301	25	5339
System Suppt.	6%	1203	56	0	1259
Total MCS	100%	20050	507	1625	22182
Grand Total	100%	36276	2684	2529	41489

### 6 D. Account Business Charts

### **Following Charts Not Applicable**

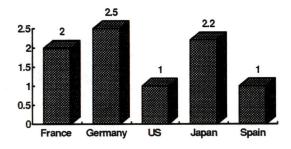
### **Total NOR**

Global Account Territory NOR (\$M)



### **Effort Year**

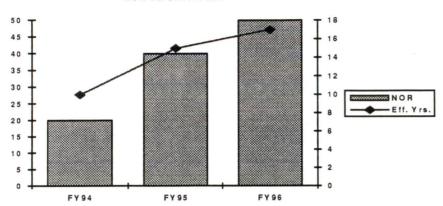
Global Account Territory Effort Years





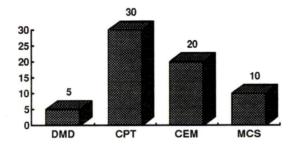
NOR VS. Effort Chart Charts Not Applicable

Global Account NOR vs. Effort Years



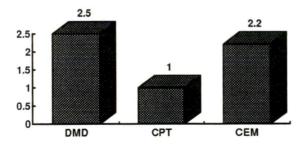
CBU Graph

Business Unit Territory NOR (\$M)



**Business Unit Effort** 

Global Account Business Unit Effort Years



### **Customer Information**

### 7.A. The Company

In 1995, Boeing will celebrate its 80th Anniversary in the Aerospace Industry. Boeing was born in Seattle, and continues to maintain it's corporate headquarters in this area. Over 75% of Boeing's 111,346 employees work in the Puget Sound area. Outside of Seattle, Boeing has major manufacturing locations in Portland, Wichita, and Philadelphia. Boeing's Huntsville, Houston, Washington D.C. and Cape Canaveral sites function primarily to support NASA Headquarters and various components of the Space Station Program.

The Company is comprised of three (3) major divisions: Boeing Commercial Airplanes (BCAG), Boeing Defense and Space (D&SG), and Boeing Computer Services (BCS).

Boeing Commercial Airplane Group (BCAG)

The Boeing Commercial Airplane Group, headquartered in Seattle, Washington, is the largest Aerospace manufacturer in the United States, as well as the world's leading manufacturer of commercial aircraft, with an estimated 60% of world market share in commercial aircraft sales and deliveries. Every 2.3 seconds, a Boeing Commercial airliner takes off at some place in the world. For the past four years, Boeing has also enjoyed the distinction of being the nation's largest exporter. Jetliners currently in production include the 737, 747, 757, and 767 -- with the new 777 model scheduled for delivery in 1995. Boeing Commercial Airplane Group represents 80% of Boeing's total sales; \$20.3B, and has approximately 76,000 employees.

Boeing Defense and Space Group (D&SG)

Boeing also has a major presence in the worldwide Defense and Space market, with capabilities in helicopters, military aircraft, electronic systems, missles and space. This group captured \$4.4B in sales in 1993 with an operating profit of \$219M.

Boeing Computer Services (BCS)

Boeing Computer Services provides computing and telecommunications support to all operating elements of the Boeing Company. Additionally, BCS develops and manages large-scale information systems for selected agencies of the Federal Government. Revenues for Boeing Computer Services in 1993 approximated \$752M.

### 7.B. Account/Partner Profile

- 1. Agreements
  - -Digital Business Agreement (DBA)
  - -DEC Hardware Maintenance Agreement
  - -DEC Software Maintenance Agreement
  - -Non-Digital Workstation Maintenance Agreement
- 2. Key Account Team contacts
  - -See page 3 Key Information Decision Maker for additional contacts
- 3. Installed Base
  - -Digital MultiVendor Customer Services realizes approximately \$20.3 annually in the Boeing Account

- 7. C. Partner Application/Services Description
  - 1. Product/Application Service Name

-Not Applicable

2. Key Markets

-

3. Competitive Advantages

\_



### Frank Shrontz Chairman Chief Executive Officer

The Boeing Company P.O. Box 3707 Seattle, WA 98124-2207

Telephone 206-655-7777 Fax 206-655-9494

The Boeing Company 1993 Annual Report



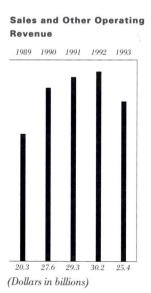
The Boeing Company, based in Seattle, Washington, is the largest aerospace firm in the United States, as measured by total sales, and the world's leading manufacturer of commercial jet transports. For the past four years, Boeing also has had the distinction of being the nation's largest ex-

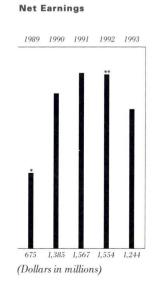
porter. The company is a major U.S. Government contractor, with capabilities in missiles and space, electronic systems, military aircraft, helicopters, and information systems management. At the end of 1993, total Boeing employment (including subsidiaries) was approximately 125,500.

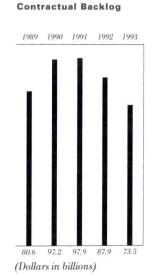
Contents	
Message to Shareholders	2
Commercial Airplane Group	10
Defense & Space Group	16
Computer Services	20
Corporate Citizenship	22
Financial Report	24

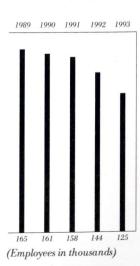
### **Financial Highlights**

(Dollars in millions except per share data)	1993	1992	1991	1990	1989
Sales and Other Operating Revenue	\$ 25,438	\$ 30,184	\$ 29,314	\$ 27,595	\$ 20,276
Net Earnings	1,244	1,554**	1,567	1,385	675*
Earnings per Share	3.66	4.57**	4.56	4.01	1.96
Return on Average Equity	15%	19%**	21%	21%	12%
Contractual Backlog	\$ 73,528	\$ 87,930	\$ 97,916	\$ 97,194	\$ 80,563
Research and Development	1,661	1,846	1,417	827	754
Capital Expenditures, net	1,317	2,160	1,850	1,586	1,362
Cash and Short-term Investments	3,108	3,614	3,453	3,326	1,863
Customer Financing	3,177	2,295	1,197	1,133	868
Long-term Debt	2,613	1,772	1,313	311	275
Cash Dividends	340	340	343	328	269









Year-end Employment

<sup>\*</sup> Exclusive of earnings of \$298 due to the adoption of Statement of Financial Accounting Standards No. 96.

<sup>\*\*</sup>Exclusive of cumulative transition adjustment of \$1,002 due to the adoption of Statement of Accounting Standards No. 106.

### Message to Shareholders

In 1993, sales declined from the record pace of last year, reflecting fewer deliveries of commercial aircraft and the downward trend in U.S. defense spending. The company remained solidly profitable, however, with earnings of \$1.2 billion, or \$3.66 per share.

We expect sales to decline in 1994 to the \$21 billion range, with net earnings also lower because of reduced sales and continued large research and development expenditures to support new programs. However, we expect that operating margins, before research and development, will be substantially maintained in 1994 — which should position the company well for the next expansion cycle.

In our commercial aircraft business, Boeing continues to take the steps necessary to adjust to the market downturn, while moving forward on a variety of fronts to improve the company's competitive position for the long term. This spring, we'll roll out the newest member of the Boeing airplane family, the 777, and we've also announced the official launch of the next-generation 737 series.

Though the worldwide demand for commercial aircraft remained weak, Boeing maintained its market leadership. Our customers announced orders for 247 Boeing jetliners, valued at \$16.6 billion – which represents more than a 70 percent dollar share of all jetliner orders announced during 1993.

In defense and space, Boeing recorded a strong profit and

Clockwise from top left. > Boeing leads the industry in service to airline customers - providing field representatives in 56 countries. engineering and spare-parts support, and training resources for pilots and maintenance personnel More than 6,500 Boeing aircraft are currently in service around the > In developing the F-22 using "Integrated Product Teams" ent disciplines and include representatives from the U.S. Air Force — creating a more efficient process for meeting the custo 777 in final assembly. In develop-777, airline customers have, for the first time, been a full partner in the design processhelping to ensure that every feature of the aircraft is configured to meet their needs.



improved margin, despite a decline in sales. This improved profitability is expected to continue into 1994. The consolidation and streamlining of our defense and space operations over the past several years—in response to declines in U.S. defense spending—leave us in good position to remain a very competitive participant in this market.

Our third business unit, Boeing Computer Services, will continue to compete for selected federal contracts to manage information systems. The division's primary mission is to provide cost-efficient computing support for company operations.

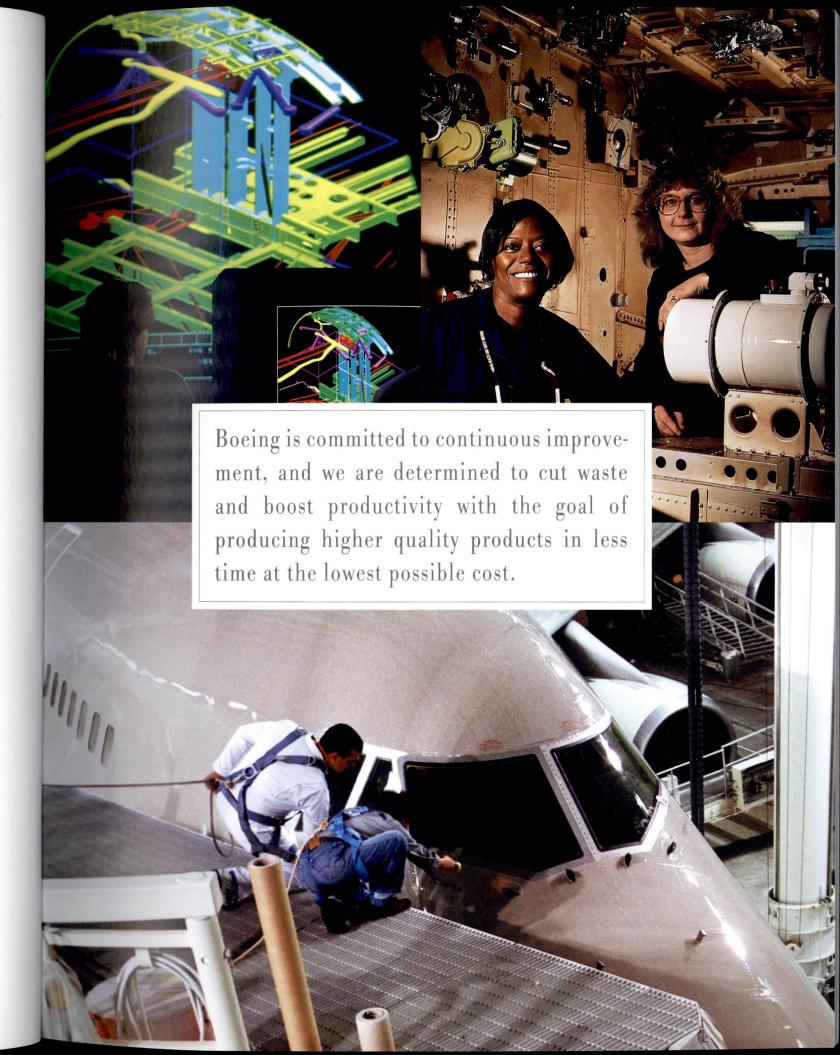
The key to Boeing's future, in every product sector, is to understand our customers better than the competition and to offer products and services that represent the best available value.

Our long-range mission is to be the number one aerospace company in the world and among the premier industrial firms in terms of quality, profitability and growth. To achieve that mission, there are six objectives that will continue to guide our actions.

The first objective, and the cornerstone of our business strategy, is continuous improvement in the quality of products and processes. Boeing is committed to continuous improvement, and we are determined to cut waste and boost productivity with the goal of producing higher quality products in less time at the lowest possible cost.

Effecting change in a company as large as Boeing is never easy, but we are happy to report that our efforts over the past

Clockwise from top left. > In developing new commercial and military aircraft, Boeing is using computers for design and preassembly - allowing engineers to verify how parts will fit together before they are manufactured. The use of these advanced computing tools is helping to reduce design rework and the need to build costly engineering mockups. Boeing commitment to continuous quality improvement is reducing waste and increasing proleaders Toby Hardiman and Annie Moerer whose efforts over a 28. month period to improve one portion of the 737 assembly process saved more than 12,000 hours in > A 747 is prepared for New technologies that deliver paint more effectively to 747 and other jetliners are helping Boeing achieve environmental improvements by reducing emissions of chemicals that contribute to smog formation. Boeing is also switching to paints with fewer solvents for many applications.



several years are beginning to show significant progress in terms of reduced cycle time, lower inventory levels, less rework and a teaming ethic that extends beyond the company to include both customers and suppliers. A commitment to continuous improvement is, of course, a task without end — but we are encouraged by the progress we've made so far, and are optimistic about the potential for gains in quality and productivity in the years ahead.

The other five objectives that we believe are essential to the company's long-term success are -

A highly skilled and motivated workforce. Our employees must get the training and resources they need to put their talents to best use.

Capable and focused management. Managers must be properly selected and trained to succeed in an environment committed to continuous quality improvement.

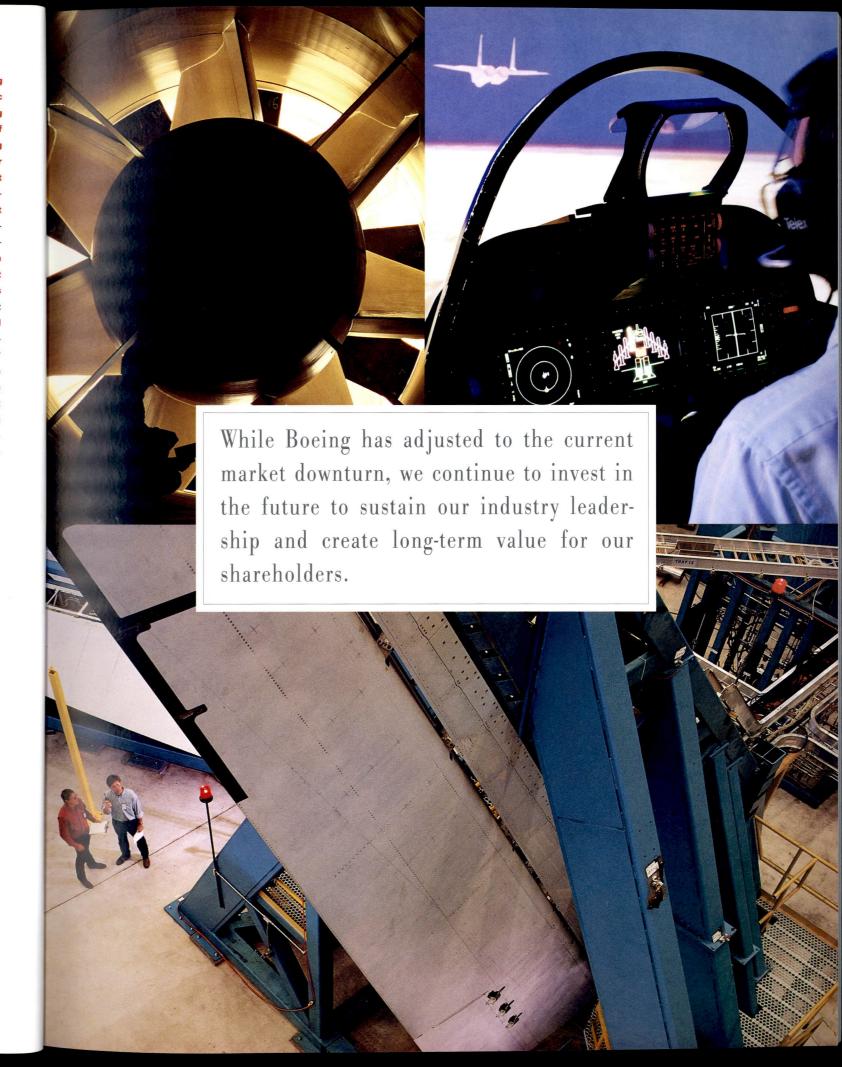
**Technical excellence.** To stay competitive, we must continue to expand our technical capability.

Financial strength. The cyclical nature of our business demands a strong financial base.

**Commitment to integrity.** Integrity, in the broadest sense, must govern the actions of the company and all its employees.

As we look to the future, it is clear that our business environment is likely to become increasingly competitive as more companies and nations seek to expand their aerospace capability. Boeing recognizes that the world is changing and we

Clockwise from top left. > Boeing wind tunnel used for aerodynamic research. In addition to studying upgrades and new derivatives of its current airplane family, Boeing is researching the market need for an aircraft larger than the current 747, as well as the next-generation supersonic transport. > At this Defense & Space Group research laboratory in Seattle, future military weapon systems can be tested under conditions that accurately simulate the demands of combat. > The "Iron Bird" at the new \$90 million Integrated Aircraft Systems Laboratory is being used to thoroughly test 777 "fly by wire" flight controls. The laboratory allows for extensive system-testing before an aircraft flies — with the goal of providing more value to customers by delivering a reliable, service-ready airplane from day one.



must change with it — by becoming more efficient and flexible in developing and producing new products, and by forging cooperative ties with other firms in the global arena when such alliances make good business sense.

While Boeing has adjusted to the current market downturn, we continue to invest in the future to sustain our industry leadership and create long-term value for our shareholders.

This year has marked the retirements of some key Boeing executives, and on behalf of the board of directors, we would like to acknowledge the outstanding contributions of Dean Thornton, Dan Pinick, and Art Hitsman, who served with distinction as presidents of the Commercial Airplane Group, Defense & Space Group, and Boeing Computer Services, respectively. We are also confident that the new operating management team, composed of Ron Woodard, Jerry King and John Warner, will effectively implement the company's strategy to achieve our long-term goals.

Evanle Shaanta

Frank Shrontz

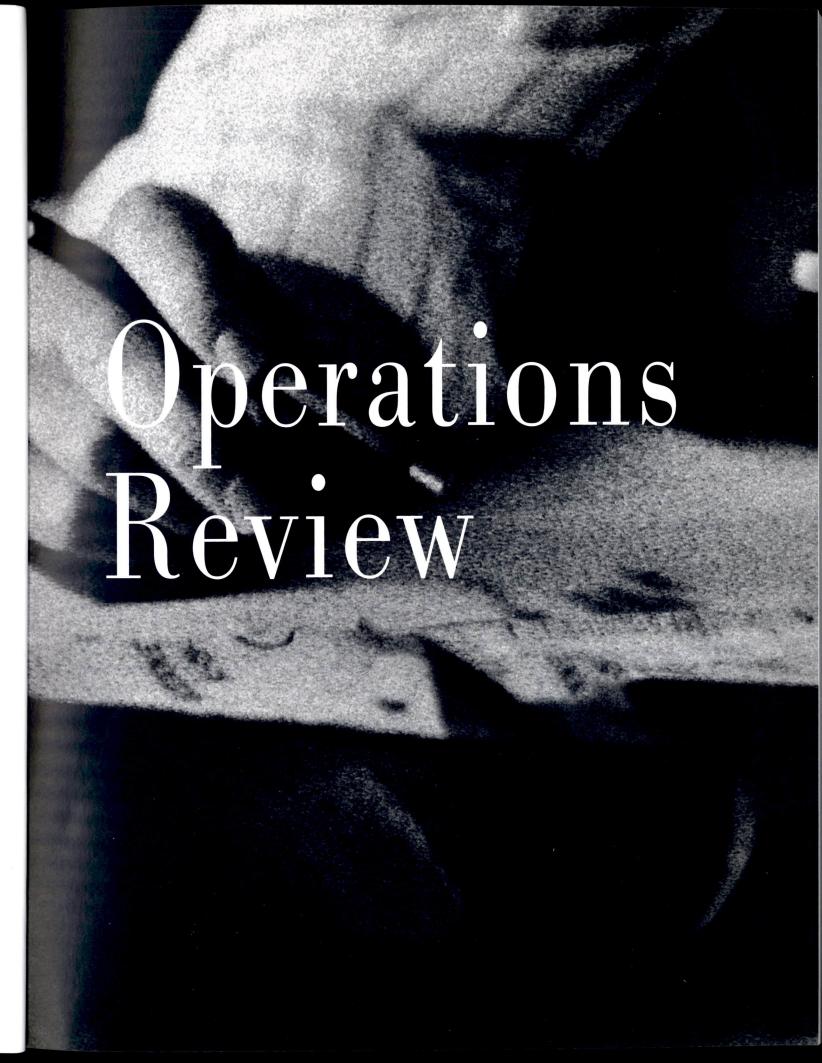
Chairman and Chief Executive Officer

Philip M. Condit
President

February 28, 1994



Frank Shrontz, Chairman and Chief Executive Officer and Philip M. Condit, President



### Commercial Aircraft

Ron Woodard is president of Boeing Commercial Airplane Group.



The Commercial Airplane Group, with approxi- 441 aircraft the year before. Projections for mately 75,000 employees, is the company's largest operating unit and accounted for about 80 percent of total sales in 1993.

During the year, Boeing scaled back production in response to lower demand for new aircraft, but continued to move forward with new aircraft remained weak, the company programs to develop new products for the future and to make the commercial airplane organization more efficient, flexible and productive with a clear focus on meeting the changing needs of airline customers.

in 1993, compared with a record high of

jetliner deliveries in 1994 are in the 260 range.

During 1993, customers announced orders for 247 Boeing jetliners valued at \$16.6 billion, compared with \$17.8 billion in 1992. Though the worldwide demand for continued to lead the competition by a wide margin, capturing more than 70 percent of the dollar share of all announced orders for jet transports.

One of the main reasons for the company's Boeing delivered a total of 330 jetliners market leadership is the breadth of the Boeing product line, which offers an aircraft with the payload, range and operating flexibility to fill virtually every market need.

The newest member of the Boeing jetliner family, the widebody 777 twinjet (see below), will be rolled out in April 1994, with the first delivery scheduled for May 1995. Since the 777 program began in October 1990, customers have announced orders for 147 aircraft, with options for 108 more. This is an exceptionally strong showing for a new airplane – given the financial troubles of many of the world's airlines over the same period.

In July, the 2,500th 737, which is the bestselling jetliner in aviation history, was delivered to Southwest Airlines. In November, the nextgeneration 737 series was launched with a commitment from Southwest Airlines for 63 aircraft (see page 14).

A historic milestone was reached during the year when the 1,000th 747, a 747-400, was rolled out at the company's Everett, Washington, facility. The 747 is the world's largest commercial transport and has carried more than 1.4 billion passengers since its introduction 25 years ago.

The world's air freight market is expected to triple over the next 18 years, and the company continues to strengthen its position in this product sector. In January 1993, United Parcel Service became the launch customer for a 767 freighter with an order for 30 aircraft. The order is the largest ever received by Boeing for an all-cargo airplane. Certification and delivery of the new 767 freighter are scheduled for October 1995.

### The Boeing 777

The 777-200 is the newest member of the Boeing airplane family and the largest twin-engine jetliner now available to the world's airlines. In developing the 777, Boeing has worked with its customers more closely than ever before to deliver a product that provides maximum value and meets the needs of the marketplace.

This team approach brings together customers, suppliers and people from diverse disciplines within the company to share information and results in a more efficient process for producing new aircraft.



The 777 family has been designed to meet the changing demands of the air travel market, offering the world's airlines the most fuelefficient jetliner in its class, with a flexible interior for quick changes in seating configuration, extensive range and payload capability, and low operating costs.

Wingspan: 199 ft 11 in Length: 209 ft 1 in Accommodation: 305-440 passengers Range: 5,600-8,500 miles

### Boeing Commercial Jetliners in Production

Boeing 747



The 747-400 seats 420-566 passengers. With its huge capacity, long range and fuel efficiency, the 747 offers the lowest operating costs per seat of any commercial jetliner. The 747-400 has an all-cargo freighter version, along with a Combi model for passengers and cargo.

Orders: 1,162\* Deliveries: 1.007

Boeing 777



The 777-200 seats 305-440 passengers, depending on configuration (see page 11). Designed to increase capacity on existing routes, serve new markets, and replace older generation wide-body jet-liners, the initial and longer range versions of the 777 are the first members of a new family of airplanes.

Orders: 147\* Deliveries: 0



The 767-200 can fly 210 passengers more than 7,500 miles in its extended-range version. The 767-300 offers somewhat less range but 20 percent more passenger capacity. For high-density operations, the -200 and -300 can carry up to 290 and 325 passengers, respectively. A 767-300 freighter is in development.

Orders: 660\* Deliveries: 518

In March 1993, Boeing rolled out the new 747-400 freighter, which will offer customers substantially more payload and range than the 747-200 freighter. The company's 767 and 747 freighters also have the potential for U.S. military sales as cargo aircraft.

**Customer Service**. The Boeing commitment to customer service is unsurpassed in the industry. The company supports more than 6,500 Boeing jetliners in service around the world,

two thirds of which are models the company no longer produces. Boeing field representatives stationed in 56 countries help customers keep their aircraft flying safely, reliably and profitably.

The company maintains the most extensive spare parts system in the industry. In spring 1993, Boeing opened its new 700,000-square-foot Spares Distribution Center near

the Seattle–Tacoma international airport. The facility doubles existing storage space and guarantees a swift response to customer needs. The company's worldwide computerized network, which provides instant inventory and shipping status for spare parts orders, recorded more than 90 million transactions in 1993.

Each year, Boeing trains more than 6,000 pilots and maintenance personnel from the world's airlines. To support that effort, a new 600,000-square-foot training center is scheduled to open in 1994.

The company has expanded its customer support for the growing fleet of Boeing jetliners in China. In 1993, field service bases in China were increased from 6 to 13, and the number of

maintenance technicians and pilots trained by Boeing doubled to 800.

New Product Research. Boeing and four European aerospace companies – Aerospatiale of France, British Aerospace, CASA of Spain and Deutsche Aerospace of Germany – began a joint study in January 1993 to examine the feasibility of a Very Large Commercial Transport capable of carrying 550–800 passengers.

Besides working with potential partners, Boeing continues to conduct its own independent research into the market for an aircraft larger than the 747-400. The company is also part of an eight-member international group studying the prospects for the next-generation supersonic jetliner.

Boeing 757



The quiet, fuel-efficient 757 can fly 180 passengers up to 4,500 miles. Seating from 180–230 passengers, depending on configuration, the 757 is ideal for high-demand, short-to-medium range operations and can also fly non-stop intercontinental routes. A freighter version is available.

Boeing 737-500, 737-300, 737-400



The 737 offers three fuselage sizes, with seating capacity from about 100 to 150 passengers in typical configurations. While a new 737 version is under development (see page 14), the current 737 models will be produced as long as demand warrants.

Orders: 3.017\* Deliveries: 2.554

Orders: 828\* Deliveries: 582

<sup>\*</sup> Orders and deliveries as of December 31, 1993. Order numbers represent those publicly announced by customers and do not include options; announced orders are not all represented in contractual backlog as included in the Financial Report section.

### The Next-Generation 737 Series

Like today's 737, the next-generation 737 will be a family of aircraft in three sizes, currently planned to range from 108 to 160 seats in a mixed-class configuration. The first model scheduled for delivery in 1997 is the 737-700, which will be equivalent in size to the current 737-300.

The new 737 series will have a larger wing and more efficient engines to extend its range - allowing U.S. transcontinental flights and routes such as Singapore – Seoul. Developed in close discussion with customers, the new 737 will preserve crew commonality with the current 737, while incorporating many new features to improve operating economics.





Wingspan: 112 ft 7 in Length: 110 ft 4 in

Accommodation: 128-149 passengers

Range: 3,395 miles

cial Airplane Group continues to make progress in its effort to produce high-quality products in less time at lower cost. Throughout the organization, employees are teaming across functional boundaries to improve the processes by which Boeing aircraft are designed, built and supported after delivery. The focus is on eliminating waste and rework, shortening flowtimes between operations, and providing customers with products and services that represent superior value.

By year end, the company had reduced the time from order implementation (the start of each aircraft) to delivery on all four current models from as many as 18 months to 12. As a result of such cycle-time improvements,

Continuous Quality Improvement. The Commer-significant inventory reductions were achieved.

Throughout the commercial airplane organization, process improvement is reducing flowtimes and work-in-process inventory. As part of the company's effort to become more efficient, an effort is under way to streamline business processes across the Commercial Airplane Group.

In the area of customer service, a largescale cross-functional initiative was begun to increase the speed and effectiveness with which Boeing identifies and resolves service-related problems.

Environmental Innovations. Boeing continues to engineering and other activities to customize introduce alternative materials and manufacturing processes to improve safety and reduce the environmental impact of its operations.

New paints and painting processes are

being used that have reduced solvent and particulate emissions from aircraft painting by approximately 50 percent, and more reductions are projected for the future.

Boeing has also developed new fluids for use in machining and cleaning parts in many operations. These fluids replace chemicals that have ozone-depleting properties and eliminate the use of toxic materials.

New Facilities. Early in 1993, Boeing opened its new 518,000-square-foot Integrated Aircraft Systems Laboratory. The facility allows for comprehensive testing of aircraft systems prior to installation, and is being used to ensure reliability of systems for the new 777.

A new 425,000-square-foot Composites Manufacturing Center started operations in April 1993, producing advanced non-metallic parts that are increasingly used in aircraft because of their light weight and high strength. The facility is producing composite tail sections for the 777.

Market Outlook. The air travel industry showed improvement in 1993. World airline passenger traffic increased by approximately 3.5 percent. In the United States, passenger traffic grew by about that same percentage, but revenue was up approximately 7 percent. As a result, the financial performance of most U.S. airlines was much improved over the prior two years.

With the exception of Japan, Asia continues to experience robust air travel growth at an annual rate of approximately 7 percent. In Europe, airline passenger traffic increased by more than 8 percent. Although yields remained weak, reflecting poor economic conditions, the European airlines have made productivity gains and should have leaner cost structures in the future.

Boeing projects that world air travel will grow at an average annual rate of somewhat more than 5 percent through the year 2010. Based on this forecast, the total air travel market will more than double over this period.

The demand for new commercial aircraft is driven by growth in passenger traffic, the rate of retirement of airplanes currently in the fleet, and airline profitability. Boeing estimates that between now and the year 2010 the combined effects of traffic growth and aircraft retirements will result in a total market for commercial jet transports (including existing aircraft orders) of approximately \$800 billion in 1994 dollars.

With the company's current line of commercial jetliners, and its continuing efforts to develop new products for the future, Boeing is in an excellent position to maintain and strengthen its market leadership.

# Defense & Space

C. Gerald King is president of Boeing Defense & Space Group.



Despite the continuing trend toward a smaller defense market, the company posted an operating profit of \$219 million on its defense and space programs – with sales of \$4.4 billion in 1993. Increased productivity and streamlined business and production practices will help the company remain a major, profitable participant in this business sector.

The Defense & Space Group continues to make steady progress in developing a culture that emphasizes quality improvement, crossfunctional teaming and understanding the needs of customers as the keys to success in this highly competitive market. By the end of 1993, virtually all employees had completed a course in the competitive practices of the world's best companies, in addition to training already received on the techniques of continuous quality improvement. Creating a more efficient, flexible and productive organization is critical if the company is to increase its market share as the defense and space industry restructures and stabilizes over the next few years.

Electronic Systems. Late in 1993, the government of Japan placed an order for two 767 Airborne Warning and Control System (AWACS)

aircraft, to be designated the E-767 (see below).

Boeing has developed a market strategy for its maritime patrol aircraft product line and is exploring opportunities in this area. The company is seeking contracts to upgrade the United Kingdom's Nimrod patrol aircraft. Boeing is also teamed with Tracor to pursue a contract to improve the mission systems on board the U.S. Navy's P-3 aircraft.

ARGOSystems, a subsidiary of the Defense & Space Group, builds electronic warfare and signal intelligence components for domestic and international markets.

Helicopters. The V-22 Osprey tiltrotor, which is being developed by Boeing and Bell Helicopter Textron, continued flight testing in 1993. Fabrication of four production-representative aircraft

will begin in 1994, with a first flight planned for December 1996 (see page 19).

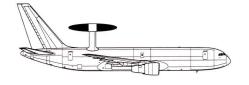
Boeing is teamed with Sikorsky to build three prototypes of the U.S. Army's RAH-66 Comanche armed reconnaissance helicopter, with the first flight scheduled for November 1995. The current Army requirement is for approximately 1,200 Comanches, which gives the program good long-term potential.

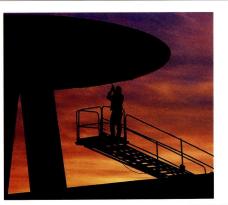
Modifications to the Boeing Chinook helicopter continue for the U.S. Government and international customers. During 1993, Boeing delivered 43 modified helicopters. The British Royal Air Force and the Royal Netherlands Air Force have ordered 16 new and remanufactured Chinooks, and Boeing plans to increase its international sales effort for the Chinook.

### 767 AWACS

For nearly two decades, the Boeing Airborne Warning and Control System (AWACS) has been the world's standard for airborne early warning systems. A military version of the 707 had served as the AWACS platform until the 707 production line closed in

1991. That same year, Boeing began offering a modified 767 commercial airframe for future AWACS, and the program was launched with an order of two 767 AWACS from the Japanese government in November 1993.



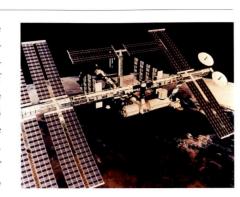


The 767 offers many advantages over the 707, including greater range and payload. Other nations expressing interest in the 767 AWACS include Italy, South Korea and Saudi Arabia. The potential market for military derivatives of the 767, including AWACS, tankers and maritime patrol, is estimated as high as 100 aircraft.

### Space Station

In August 1993, Boeing was selected as NASA's prime contractor to build the Space Station. The company has played a key role in the program since 1987. The Space Station will be the first international orbiting laboratory where scientists from diverse disciplines can conduct research in a microgravity environment.

As prime contractor, Boeing will be responsible for the design, development, physical and analytical integration, test, delivery and launch of the space station vehicle. Joining the United States in the project are 13 countries in the European Space Agency, Japan, Canada and Russia. First-element launch is scheduled for 1997. Plans call for the Space Station, which accommodates a six-person crew, to be completed in the year 2001.



Military Airplanes. Boeing is teamed with prime slated for delivery to Northrop in May 1994. contractor Lockheed to produce the nextgeneration air superiority fighter for the U.S. Air Force. The contract is in the Engineering and Manufacturing Development phase, which calls for the production of nine aircraft. Flight testing of the first F-22 is scheduled for 1996. The F-22 program positions Boeing to remain a long-term participant in the development of advanced military fighters.

The company continues to work with both U.S. and foreign governments to develop military derivatives of Boeing commercial airplanes to meet a wide range of needs, including military equipment transport, electronic mission platforms and aerial refueling.

During 1993, Boeing delivered the last of the 20 production B-2 bomber aft-center sections - the largest structural aircraft components ever made primarily out of composite materials. The final B-2 outboard sections are

Boeing began exploring a concept for a modular, multi-role fighter that could perform conventional takeoff and landing missions for the U.S. Air Force, short takeoff and vertical landing missions for the Marine Corps, as well as conventional carrier takeoff and landings for the Navy.

A Boeing-led team submitted a proposal to the U.S. Air Force to explore the concept of an aircraft-carried, high-energy laser that would engage and destroy ballistic missiles while still in their boost phase. Concept design for the Airborne Laser program is expected to begin in 1994. Studies indicate a 747 is the best platform to carry the laser weapon system.

Missiles and Space. Boeing was selected as prime contractor for the redesigned Space Station, an acknowledgment of the Defense & Space Group's ability to manage large, complex integration projects (see above).

In other space projects, the company is working to develop the Lunar Scout spacecraft that will map the surface of the moon. Boeing also earned the first 100 percent award fee from the U.S. Air Force for excellence in its continuing support of the Inertial Upper Stage booster rocket. In addition, a Boeing protein crystal growth experiment, serving as a pathfinder for potential commercial space research projects, flew aboard Russia's Mir space station.

Production of Avenger air-defense systems topped 400 units during 1993, with the U.S. Army Missile Command naming Boeing as one of only five contractors to earn reduced oversight of its production line under the Contractor Performance Certification Program.

Product Support. In 1993, the Product Support Division continued to reduce costs and focus on winning new business for modification and

post-production support work. Late in the year. Boeing won a contract for logistics support for the U.S. Air Force special air mission fleet. The five-year contract involves support for the two 747-200 Air Force One aircraft delivered in 1990, as well as seven VC-137 executive transport airplanes.

Modernization of B-1B and B-52 bombers for conventional warfare missions continues. The company completed the initial conventional mission upgrade on a B-52H bomber late in 1993, and delivered the airplane to the Air Force for flight tests.

Boeing delivered the first French Air Force C-135FR tanker modified with wing-mounted hose and drogue refueling pods. Boeing designed the installation and is under contract to produce 11 kits. The U.S. Air Force has expressed interest in a similar modification program.

### V-22

The V-22 Osprey is the first aircraft designed from the start to meet the needs of all four U.S. armed services. The V-22 takes off and lands like a helicopter but, once airborne, rotates its engines and converts to a turboprop airplane capable of high-speed, highaltitude flight. The aircraft can carry 24 combat troops or up to 20,000 pounds of internal or external cargo.

The Navy contract is in the engineering and manufacturing development phase, and the fabrication of four production-representative aircraft will begin in 1994, with a first flight planned for December 1996. Boeing is responsible for the fuselage and all subsystems, digital avionics and flyby-wire flight-control systems.



## Computer Services

John Warner is president of Boeing Computer Services.



Boeing Computer Services provides computing and telecommunications support to all operating elements of the company. The division also develops and manages large-scale information systems for selected agencies of the federal government.

About three-fourths of the work of Computer Services is supporting company operations. The focus of this internal support role is to help Boeing enhance its competitive position, in every product sector, through the efficient use of computing technology.

Cross-functional teams have identified specific areas for major cost reductions in areas

that affect computing workstation unit cost and software development and maintenance costs. The goal is to improve the value and cost-efficiency of all services delivered.

Progress was made during the year in implementing the principles of continuous quality improvement. All managers have completed training in the techniques used by the world's most successful companies to improve business practices. By mid-1994, all employees of Boeing Computer Services will have completed this training.

Quality improvement teams have identified computing costs in terms of identifiable

### Cost Reduction Pays Off in Additional Computing Availability

One example of the division's efforts to reduce costs and derive more value from its computing technology is improving the availability of computing systems to company users. There are approximately 17,000 engineering and scientific workstations used for research, engineering analysis and design. In addition, more than 89,000 workstations, personal computers and terminals are used for other important engineering and business functions.

When a workstation or any element of the information system fails, the downtime is measured in "lost workstation hours." In 1990, Computer Services committed to improving system availability by reducing lost workstation hours by 30 percent per year over the next five years. By simplifying and standardizing the procedures used to fix problems, and by consolidating several maintenance groups into one, the division has nearly achieved its five-year target in just three years. By the end of 1993, lost workstation hours

had been reduced by 76 percent. As a result, about 190,000 more workstation hours per month are available across the company.



processes. This was an essential first step toward achieving process improvement throughout division operations.

Through advanced computing technologies, the research and technology organization has contributed to cost and cycle-time reductions in the manufacturing and product support areas. Graphics software developed by the group is being used to support design and digital pre-assembly of the 777, F-22 fighter aircraft and the next-generation 737.

In the division's external business, growth expectations were met and profit performance was greater than projected due, in part, to government compensation linked to outstanding performance. Boeing Computer Services, teamed with prime contractor Grumman,

began to implement the Johnson Space Center Information Systems contract during the year. The contract is for non-mission related data processing, networking and telecommunications at the Space Center in Houston.

Progress continued on the Reserve Component Automation System (RCAS) contract. RCAS is a 12-year contract, valued at \$1.8 billion, to enhance the readiness of Army National Guard and Army Reserve units by providing more timely and accurate mobilization planning information. In 1993, Boeing-developed software was delivered for testing, and hardware was installed at 495 Guard and Reserve units. The company will install RCAS at an additional 1,200 units during 1994.

### Community

### **Contributions and Education**

For many years, Boeing and its employees have maintained a tradition of giving. In 1993, contributions totaling more than \$59 million were directed at a wide range of community programs in areas such as education, health and human services, civic participation and the arts. Boeing employees also volunteered several million hours of their own time to support many worthwhile community projects.

### 1993 Employee and Corporate Gifts Total: \$59.4 Million

\$32.4 million (includes \$6.3 million of in-kind services, equipment and supplies)



Retiree Gifts \$27 million (includes \$24.7 million from the Boeing Employees Good Neighbor Fund and \$2.3 million in gift matching)



The largest portion of the company's corporate contributions went to support education. Boeing donated more than \$10 million to educational programs — which included support for colleges, universities and K-12 education.

For the past several years, Boeing has placed particular emphasis on providing leadership and financial support to bring about fundamental reforms in K-12 education. The company believes that the principles of continuous quality improvement, which are helping Boeing and many other American companies meet the challenge of global competition, also can be applied to improving public education to generate higher student performance.

### **Small Business Programs**

For more than 40 years, Boeing has helped lead the aerospace industry with programs to provide small and minority-owned firms with an equitable opportunity to compete for contracts. Subcontract awards to small and minority-owned businesses exceeded \$1.7 billion in 1993.

### **Equal Opportunity Employer**

Boeing is an equal opportunity employer and seeks to attract and retain the best qualified people, regardless of race, sex, age, religion, national origin or veteran status. The affirmative action effort includes programs that promote the active recruitment of a diverse workforce.

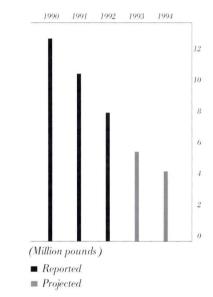
### Safety, Health and Environment

Boeing is committed to providing a safe and healthful workplace for its employees and protecting the environment. Safety, health and environmental improvements are an integral part of the company's efforts to become more efficient and productive.

In 1993, there was a sharpened focus across the company on reducing employee injury and illness, hazardous materials use, and hazardous and solid-waste generation. The company also developed specific safety and environmental performance measures for use starting in 1994.

Boeing is working to be among the industry leaders in responsible environmental management. The company is continuing its efforts to minimize the environmental

### **Chemical Reduction (Releases)**



impact of its operations by introducing new or alternative materials and processes—without compromising product quality or employee safety.

Continuous quality improvement methods are being applied to managing how chemicals are stored, used and disposed of in the workplace.

Air emissions, specifically solvents from aircraft painting and parts cleaning, represent most of

the company's chemical releases. In 1991, Boeing was among the early industry leaders to sign up for the Environmental Protection Agency's (EPA) voluntary "33/50" program. It called on industries nationwide to cut their emissions of certain chemicals 33 percent by the end of 1992 and 50 percent by the end of 1995.

Despite record aircraft production in 1991 and 1992, Boeing surpassed the EPA's interim 33 percent goal and expects to meet the 50 percent target well ahead of 1995 (see chart).

Solid-waste reductions continue to be led by the company's aggressive recycling effort. Boeing recycles about 50 percent, by weight, of all materials used – returning revenue to operating units and avoiding landfill costs.

# Financial Report

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# Management's Discussion and Analysis of Financial Condition and Results of Operations

# **Results of Operations**

#### Revenues

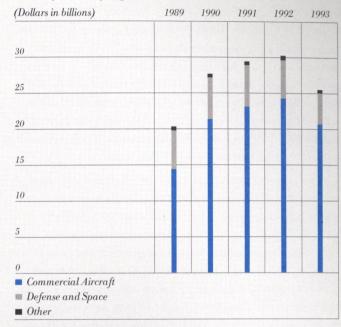
Operating revenues for 1993 were \$25.4 billion compared to \$30.2 billion and \$29.3 billion for 1992 and 1991. Commercial aircraft products and services accounted for 81%, 80% and 78% of total operating revenues for the years 1993, 1992 and 1991. The Company's commercial jet transport market share was approximately 60% in terms of sales value for each of the three years.

# Commercial jet transport deliveries by model:

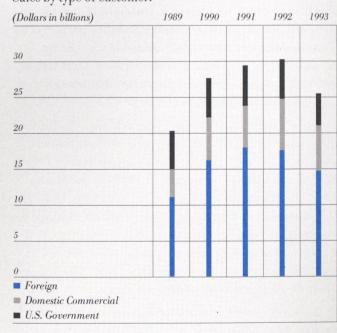
	1993	1992	1991
737	152	218	215
747	56	61	64
757	71	99	80
767	51	63	62
Total	330	441	421

Commercial production rates were at 321/2 aircraft per month at the beginning of 1993 and ended the year at 23 per month. In early 1994, the 747 production rate was reduced from 5 to 3 per month. Based on current production schedules, the 737 rate will be reduced from 10 to 81/2 per month in the fourth quarter of 1994, the 757 rate will be reduced from 5 to 4 per month in the first quarter of 1995, the 767 rate will be increased from 3 to 4 per month in the first quarter of 1995, and the 747 rate will be reduced from 3 to 2 per month in January 1995. Planned production rates will continue to be adjusted as necessary to match customer orders. Production of the new 777 model is on schedule to support the flight test program starting in mid-1994, and production activity will continue to build until initial deliveries begin in mid-1995. Commercial jet transport deliveries for 1994 are currently projected to be in the 260 range. Commercial transportation sales trends are discussed further in the Commercial Aircraft Market Environment section on pages 29-32.

# Sales by industry segment:



# Sales by type of customer:



Defense and space segment revenues were \$4.4 billion for 1993, down from \$5.4 billion and \$5.8 billion for 1992 and 1991, respectively. Reduced B-2 bomber subcontract work was the major contributor to the lower sales in 1993. Several program terminations that occurred in 1991 and 1992 contributed to the decline in sales in 1992 compared with 1991, partially offset by increased sales in the B-2 program and F-22 fighter aircraft program. The Company's defense and space business is broadly diversified, and no program other than B-2 accounted for more than 10% of total 1991–1993 defense and space revenues. B-2 bomber subcontract work, which accounted for less than 20% of total 1991–1993 defense and space business revenues, will continue to decline over the next few years.

The principal contributors to 1993 defense and space sales included B-2 bomber subcontract work, production and remanufacturing of CH-47 helicopters, F-22 fighter aircraft engineering and manufacturing development activities, Space Station work packages, E-3 Airborne Warning and Control System (AWACS) updates, A-6 composite wing production (terminated for convenience by the Government during 1993), RAH-66 Comanche helicopter development activities, KC-135 tanker update modifications, V-22 Osprey tiltrotor transport development and test activities, Avenger air-defense system deliveries and B-1B bomber avionics. U.S. Government classified projects also continued to contribute to defense and space segment revenues. The Company's activities on the F-22, RAH-66 and V-22 programs are under joint venture teaming arrangements with other companies.

NASA's selection of Boeing Defense & Space Group as the prime contractor for the restructured Space Station program will result in an increase of approximately 10% in defense and space segment sales in 1994 compared with 1993, based on current programs and schedules. However, U.S. Government defense and space programs continue to be subject to funding constraints, and further program stretch-outs or curtailments are possible. Defense and space sales trends are discussed further in the Defense and Space Market Environment section on page 33.

Based on current programs and schedules, the Company projects total 1994 sales to be in the \$21 billion range.

#### Earnings

Net earnings for 1993 on a comparable basis with the prior two years were as follows:

(Dollars in millions)	1993	1992	1991
Net earnings as reported	\$1,244	\$ 552	\$1,567
Effect of SFAS No. 106			
accounting change			
for retiree health care:			
Cumulative adjustment			
for transition obligation		1,002	
Pro-forma current			
period cost			(70)
Net earnings on a			
comparable basis	\$1,244	\$1,554	\$1,497

The Company elected to implement Statement of Financial Accounting Standards (SFAS) No. 106, Employers' Accounting for Postretirement Benefits Other Than Pensions, in the fourth quarter of 1992, resulting in the accrual of a cumulative adjustment for retiree health care costs for active employees. The Company's previous practice was to accrue retiree health care liability upon an employee's retirement. Although the new accounting standard results in a higher level of retiree health care costs being recognized, there is no impact on the Company's cash flow requirements as there are no current plans to fund the accrued obligation.

The \$310 million decrease in net earnings for 1993 compared to 1992, excluding the cumulative effect of the SFAS No. 106 accounting change, was primarily due to lower commercial aircraft sales, together with lower corporate investment income and continued high levels of research and development expenditures, principally for the new 777 jet transport program. These factors were partially offset by improved defense and space earnings despite lower sales, and increased income from customer financing.

The \$57 million increase in net earnings for 1992 compared to 1991, on a comparable basis adjusted for the SFAS No. 106 accounting change, was primarily due to increased commercial aircraft sales and improved cost performance, particularly in the defense and space segment. These factors were partially offset by higher research and development expense (principally increased 777 program expenditures), lower corporate investment income and a higher effective federal income tax rate.

Net earnings for 1991 were \$182 million higher than 1990 earnings, primarily due to increased commercial aircraft sales, a lower defense and space segment operating loss and a lower effective federal income tax rate. These factors were partially offset by higher research and development expense (principally increased 777 program expenditures) and lower corporate investment income.

The effective federal income tax rates were 31.7%, 31.1% and 28.9% for 1993, 1992 and 1991, respectively. Relative to the statutory rates, the lower effective tax rates for the three years were due primarily to tax-exempt income benefits from export sales, and research and development benefits in 1991. (See Note 6 to the Consolidated Financial Statements.)

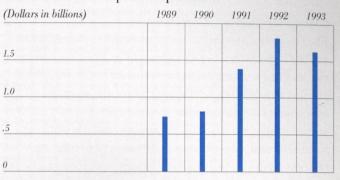
Essentially all of the Company's business is performed under contract, and therefore operating results trends are not significantly influenced by the effect of changing prices. Additional information relating to sales and earnings contributions by business segment can be found in Note 14 to the Consolidated Financial Statements.

Although 1994 sales are projected to be lower than 1993 sales, operating profit margins, exclusive of research and development expenditures for new and derivative jet transport models, are expected to be substantially maintained through the efficiencies gained by process improvements in all aspects of the Company's operations. However, because of the impact of commercial aircraft research and development expenditures discussed below together with the lower sales level, there will be a significant decline in net earnings as a percent of sales for 1994.

# Research and Development Activities

Research and development expenditures charged directly to earnings include design, developmental and related test activities for new and derivative commercial jet transports, other company-sponsored product development, and basic defense and space research and development not recoverable under U.S. Government flexibly priced contracts.

# Research and development expensed:



The principal commercial developmental program during the 1991-1993 time period has been the new 777 wide-body twinjet. Structural design activities on the 777 program peaked in 1992, resulting in the lower level of research and development charges in 1993 compared to 1992. The 777 development program has now transitioned from primarily structural and systems design activities to primarily systems integration and test activities. Flight testing will begin in mid-1994, leading to initial deliveries in mid-1995. The principal commercial developmental projects with significant expenditures in 1994 include the 777 base model, the extended-range version of the 777 for which deliveries begin in late 1996, initial structural design activities on the 737-700 for which deliveries begin in late 1997, and the freighter version of the 767 to be delivered in the fourth quarter of 1995. The first freighter version of the 747-400, in development since 1989, was delivered in the fourth quarter of 1993.

The major developmental programs in the defense and space segment, funded principally under costreimbursement-type contracts, include Space Station work packages, F-22 fighter aircraft, V-22 Osprey tiltrotor transport and RAH-66 Comanche helicopter.

The total amount of research and development expenditures charged to expense is projected to increase somewhat in 1994 from the \$1.7 billion level in 1993.

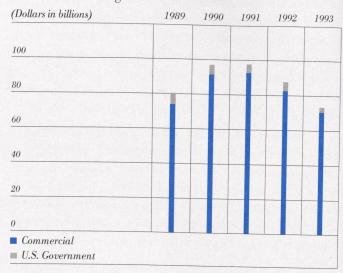
#### **Continuous Quality Improvement**

The Company remains strongly committed to continuous quality improvement in all aspects of its business and to maintaining a strong focus on customer needs, including product capabilities, technology, in-service economics and product support. Major long-term productivity gains are being aggressively pursued as substantial resources have been and will continue to be invested in training, restructuring of processes, technology, and organizational realignment.

In connection with the 777 developmental program, such measures have included early application of substantial resources for integrated product teams, design interface with customer representatives, use of advanced three-dimensional digital product definition and digital preassembly computer applications, and increased use of automated manufacturing processes. Although these measures have required significant current investments, substantial long-term benefits are anticipated from reductions in design changes, less rework, and improved quality of internally manufactured and supplier parts. Major process improvements and promising pilot projects are also being pursued on other commercial and military programs to improve quality, reduce inventory and shorten cycle times.

#### Backlog

### Contractual backlog:



Total contractual backlog of unfilled orders at December 31, 1993, was \$73.5 billion, compared with \$87.9 billion at the end of 1992. Of the total 1993 backlog, \$70.5 billion or 96% was for commercial customers (including foreign governments) and \$3.0 billion or 4% was for the U.S. Government. Comparable figures at the end of 1992 were \$82.6 billion or 94% commercial, and \$5.3 billion or 6% U.S. Government. Not included in contractual backlog are purchase options and announced orders for which definitive contracts have not been executed and orders from customers which have filed for bankruptcy protection.

U.S. Government and foreign military backlog is limited to amounts obligated to contracts. Unobligated U.S. Government contract values not included in backlog at December 31, 1993 and 1992, totaled \$6.9 billion and \$7.6 billion.

In evaluating the Company's contractual backlog for commercial customers, certain risk factors should be considered. Many of the orders extend out several years, with approximately 60% of the contractual backlog for commercial jet airplanes scheduled to be delivered after 1995. Continuation of the weak economic environment in many areas of the world could result in additional customer requests for rescheduling or possible cancellation of contractual orders.

## **Commercial Aircraft Market Environment**

The worldwide market for commercial jet transports is predominantly driven by long-term trends in airline passenger traffic. The principal factors in long-term traffic growth are sustained economic growth in developed and emerging markets and political stability. Demand for the Company's products is further influenced by profitability of the airline industry, the globalization and consolidation of the industry, limitations of airport and air traffic control infrastructure, noise regulations, product development and strategy, and price and other competitive factors.

#### **Passenger Traffic Trends**

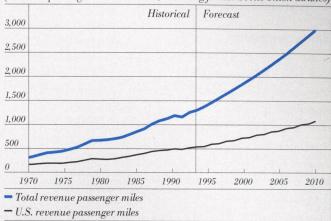
Worldwide airline passenger traffic declined in 1991 – the first annual decline since the start of the jet era – due principally to the economic and political impacts of the Persian Gulf conflict. Passenger traffic in 1992 was approximately 8% higher than the depressed levels of 1991 for the airline industry worldwide, excluding Aeroflot of the Commonwealth of Independent States (CIS). Relative to 1990 levels, 1992 worldwide airline passenger traffic represented an increase of approximately 5%. The growth in worldwide airline passenger traffic in 1993 over 1992 was approximately 31/2%. For the three-year period 1991-1993, the average annual growth rate for worldwide passenger traffic was approximately 3%, significantly below the long-term historical growth rate. Worldwide economic growth rates in general were similarly below long-term historical averages during this period.

Passenger traffic gains by U.S. airlines in 1992 were approximately 6½%, largely due to aggressive price discounting that resulted in no revenue growth and significant operating losses in the aggregate. In 1993 passenger traffic of U.S. carriers increased approximately 3½%; however, revenue was up approximately 7%. As a result, U.S. airlines realized an operating profit in the aggregate for 1993, in contrast to their significant operating losses in 1992 and 1991.

European airline passenger traffic increased approximately 8% in 1993, but revenue yields remained weak, reflecting current economic conditions. With the exception of Japan, which experienced no growth in airline passenger traffic in 1993, Asia continues to experience high traffic growth. Passenger traffic growth in Asian countries other than Japan grew approximately 7% in 1993.

#### World air travel:

(Revenue passenger miles in billions, excluding former Soviet Union airlines)



The above graph shows the growth in world air travel, excluding traffic of former Soviet Union airlines, as measured by revenue passenger miles from 1970 through 1993, and the Company's forecast of world air travel through the year 2010. The forecasted revenue passenger miles represent an average annual growth rate of somewhat over 5%, compared with the long-term historical annual growth rate of nearly 7% through 1993. The forecasted average annual growth rate, although lower than the historical rate, results in greater annual increases in the absolute number of revenue passenger miles because of the growing volume to which the annual growth rates apply.

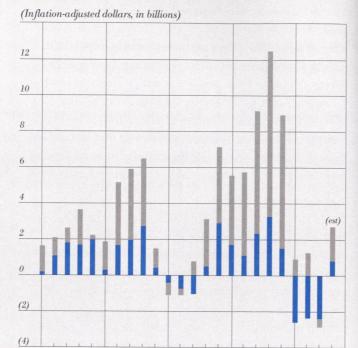
Based on this long-term forecast of air traffic growth—taking into consideration increasing utilization levels of the worldwide fleet and requirements to replace older aircraft—the Company estimates the total commercial jet transport market through the year 2010, including existing aircraft orders, at approximately \$800 billion in 1994 dollars. However, the realization of this market forecast under economically rational circumstances depends on the customer airlines' ability to achieve and sustain reasonable levels of profits over the long term.

#### **Airline Profitability**

The domestic and international airline industry in aggregate achieved a general long-term growth trend of positive operating profits from 1970 through 1989, although with significantly reduced operating profits or operating losses during the 1979 -1983 period. That long-term profitability trend has again been seriously disrupted, especially with respect to the major U.S. airlines. From 1990-1992, the U.S. airline industry incurred very substantial losses. Additionally, the major non-U.S. airlines experienced operating losses in the aggregate during 1992. Through a combination of passenger traffic growth, improved revenue yields, lower fuel costs, aggressive cost reduction measures and other productivity improvements, both U.S. and non-U.S. airlines realized positive operating profits in 1993 in the aggregate. Net profits, which include interest expense on debt obligations, however, were negative for the fourth consecutive year for the U.S. airline industry.

Until the airline industry can achieve sustained levels of acceptable profitability, future orders of the Company's commercial jet transports will be restricted. Many airlines have taken aggressive cost reduction measures, and the airline industry has continued to move toward more consolidation and integration of operations. These actions, coupled with rational fare structures and continued passenger traffic growth, are important factors in returning the airline industry to profitability and improved financial health.

Airline industry profits-for core airline operations:



## **Industry Competitiveness**

■ U.S. major airlines

Non-U.S. airlines

As all jet transport manufacturers face declining production rates, competitive pressures for new orders continue to be intense in terms of pricing and other conditions. With respect to pricing pressures, the Company's continuous quality improvement and cost reduction efforts are intended to enable the Company to maintain market share at satisfactory margins.

1985

1990

In July 1992 the U.S. Government and the European Community announced agreement on interpreting the commercial aircraft code of the General Agreement on Tariffs and Trade (GATT). The 1992 agreement limits direct European government development support subsidies to 33% and prohibits government production loans and government-subsidized sales arrangements. While Boeing would have preferred a ban on all government subsidies for commercial airplane programs, the controls embodied in the 1992 agreement were considered important in limiting future government support to the Company's European competitor. A new multi-lateral subsidies code was incorporated in the GATT agreement reached in December 1993, limiting government subsidies by all countries covered by the GATT. The more restrictive 1992 bilateral agreement remains in effect for the European Community. Further limiting of government subsidies to foreign aircraft manufacturing companies remains a primary goal of Boeing to ensure fair competition.

The aircraft manufacturing industry in the former Soviet Union (FSU) can be expected to capture the predominant share of the future FSU market, although current instability makes that market environment unpredictable. However, the Company believes the FSU market is large and diverse, and presents significant sales opportunities over the longer term. With regard to the commercial jet transport market outside the FSU, the FSU aircraft manufacturing industry, as well as those in certain Asian countries, has the potential of increasing competition, either independently or through alliances. Although this represents an added degree of uncertainty, the Company believes it will be able to maintain its long-term favorable market share through its wide range of product offerings and technological improvements, its broad-based network of domestic and international suppliers and program participants, its extensive customer service system, opportunities for strategic alliances, and continued emphasis on quality and continuous process improvements.

#### **World Aircraft Fleet**

Excess capacity in the worldwide aircraft fleet has contributed to the decline in sales and backlog. Approximately 800 commercial jet transports on average were in storage status during 1993. However, due to noise constraints and the inferior operating economics of older aircraft, only about one-half of the stored aircraft are expected to be put back into commercial service. More than 70% of the inactive aircraft do not meet the Federal Aviation Administration's more stringent Stage III noise requirements and have an average age of well over 20 years. The average age of the inactive aircraft meeting Stage III noise requirements is approximately 10 years.

Nearly 40% of the 10,500 jet aircraft in the non-FSU worldwide commercial fleet do not meet noise requirements scheduled to come into effect by the end of the decade. Compliance with the new requirements, where feasible, requires modifications to older aircraft. The costs of these modifications, coupled with increasing maintenance costs and inferior operating economics associated with older aircraft, are projected to result in the retirement of up to 3,500 commercial jet transports by the year 2010 and therefore create substantial new aircraft demand.

#### **Product Offerings**

The Company continually evaluates opportunities to improve current models, and conducts ongoing market-place assessments to ensure that its family of jet transports is well positioned to meet future requirements of the airline industry. The fundamental strategy is to maintain a broad product line responsive to changing market conditions by maximizing commonality within and across the Boeing family of airplanes. The Company expects to continue leading the industry in customer satisfaction by offering products that exhibit the highest standards of quality, safety, technical excellence, economic performance and in-service support.

The major focus of development activities over the past three years has been the 777 wide-body twinjet which is scheduled to enter airline service in mid-1995. The new 777 model is designed to meet airline requirements for an efficient, comfortable, high-capacity airplane to be used in domestic and intra-regional markets. An extended-range version of the 777 is being offered for delivery in late 1996, and the aircraft could be further developed for greater capability, including additional range and a stretched fuselage. Orders for 147 and options for 108 777s had been announced by 16 customers as of year end 1993.

During 1993 the Company began development activities on the next generation of the 737 family of short-tomedium-range jetliners that will provide greater range, increased speed, and reduced noise and emissions while maintaining 737 family commonality. The first nextgeneration 737, designated the 737-700, is the middlesized member of the 737 family. Customer orders will determine the sequence and timing of the introduction of the smaller 737-600 and the larger 737-800. Approximately 40% of the dollar value of the projected commercial jet transport deliveries through the year 2010 is expected to be in the size category that includes the 737 family. The improved operational capabilities and commonality benefits should give the new 737s significant competitive advantages. Initial 737-700 deliveries are scheduled for late 1997.

Other derivatives recently developed or presently in development include the freighter version of the 747-400, in development since 1989 and first delivered in 1993, and the freighter version of the 767 for which deliveries begin in 1995.

The Company continues to assess the market potential for new or derivative aircraft that are larger and have more range than the 747-400. Because of a relatively limited market and the heavy resource investment levels required, the Company signed an agreement with four European aerospace companies in 1993 to study the feasibility of developing a new aircraft capable of carrying between 550 and 800 passengers.

While product development activities are principally oriented toward maintaining and enhancing the competitiveness of the Boeing subsonic fleet, the Company is also involved in studies to understand the technological and economic issues associated with development of commercial supersonic aircraft. At this time, environmental issues such as takeoff noise and emissions at high altitude appear manageable.

#### Summary

Although significant market uncertainties exist — especially with respect to near-term economic conditions, the airline industry's profitability and financial health, and the intense competitive environment — the long-term market outlook remains favorable. The Company is well positioned in all segments of the commercial jet transport market, and intends to remain the airline industry's preferred supplier through emphasis on quality processes, customer satisfaction and product offerings.

#### **Defense and Space Market Environment**

Changing defense priorities and severe federal government budget pressures have significantly changed the market environment for the defense and space segment. Over the three-year period 1991-1993, total U.S. Government defense and space funding declined approximately 20% in inflation-adjusted dollars, and further declines are projected over the next few years. As a consequence, some of the Company's programs have been subject to stretch-out, curtailment or termination. Although a number of programs remain subject to future stretch-out and curtailment, the Company's defense and space business is broadly diversified and includes a number of priority developmental programs and candidate programs for system upgrade or modification. Internationally, defense budgets have also moderated; however, there continue to be opportunities for the sale of Boeing systems to foreign

Major defense and space contract awards during 1993 included NASA's selection of Boeing as the prime contractor for the restructured Space Station program, and the initial contract for two 767 Airborne Warning and Control Systems (AWACS) for the government of Japan. The selection as prime contractor for the Space Station program is an acknowledgment of Boeing Defense & Space Group's ability to effectively manage large, complex integration projects, and represents an assignment of great importance to both the Company and the country's manned space program. Boeing will be responsible for the design, development, physical integration, test and launch preparation of the Space Station, as well as completing the original work package to build the habitat and laboratory modules. The 767 AWACS program is expected to provide substantial business opportunities over the long term. Japanese officials have indicated they intend to seek funding for two additional 767 AWACS in 1994, and the Company continues to discuss 767 AWACS requirements with other countries. In addition to the 767 AWACS, other longer-term defense and space business opportunities associated with the Company's commercial aircraft include U.S. military airlift and tankers. The Pentagon's Defense Acquisition Board is presently evaluating potential future acquisition of commercial wide-body aircraft such as the 747 and 767 to supplement the military airlift fleet.

A larger percentage of the Company's defense and space business was under cost-reimbursement-type contracts in 1993 compared to 1991 and 1992. The current major developmental programs, principally the Space Station, F-22 fighter, RAH-66 Comanche helicopter and V-22 Osprey tiltrotor aircraft, primarily involve cost-reimbursement-type contracts.

In addition to the developmental programs mentioned above, the major revenue-producing programs for 1994 include production and remanufacturing of CH-47 helicopters, continuing B-2 bomber subcontract work, production of the Avenger air-defense system, updating and modifying various military aircraft and systems, 767 AWACS, other program support and classified project activities.

The current defense and space market is characterized by aggressive competition for the fewer opportunities that remain and significant restructuring throughout the industry in the form of consolidations, acquisitions, relocations and organizational realignment. The Company continues to examine whether its long-term strategy is best pursued through internal means or through acquisitions, dispositions or alliances. During 1991 and 1992, a major organizational consolidation and restructuring of the Company's various defense and space divisions was accomplished, positioning the new Defense & Space Group to effectively compete in this new market environment. Joint venture arrangements with other companies are expected to continue to be common for major developmental programs and the follow-on production activities. Currently, the Company's activities in the F-22, V-22 and RAH-66 developmental programs are under joint venture arrangements.

#### **Other Business Activities**

Other business activities include developing large-scale information systems and conducting management services through Boeing Computer Services, principally for government agencies. An information systems contract to enhance the readiness of the Army Reserve and National Guard units is projected to be the single largest contributor to other business sales for the next few years. In early 1993, the Company elected to discontinue its involvement with the U.S. Government's strategic petroleum reserve program.

#### **Liquidity and Capital Resources**

The primary factors that affect the Company's investment requirements and liquidity position, other than operating results associated with current sales activity, include the timing of new and derivative commercial jet transport programs which require both high developmental expenditures and initial inventory buildup; cyclical growth and expansion requirements; requirements to provide customer financing assistance; and the timing of federal income tax payments.

#### Cash Flow Summary

Following is a summary of cash flow (based on changes in cash and short-term investments) to highlight and facilitate discussion of the principal cash flow elements:

(Dollars in billions)	1993	1992	1991
Cash flow from earnings (a)	\$ 2.4	\$ 2.7	\$ 2.4
Facilities and equipment			
expenditures (b)	(1.3)	(2.2)	(1.9
Net decrease in gross inventory	0.6	2.0	1.0
Reductions in customer advances	(1.3)	(2.1)	(0.6
Net inventory change (c)	(0.7)	(0.1)	$\frac{0.4}{0.4}$
Net changes in receivables,			
liabilities, and deferred			
income taxes (d)	(0.4)	1.0	(0.9)
Pension funding in excess			(0.5)
of expense	(0.1)	(0.2)	(0.4)
Net increase in customer		(	(0.1)
financing (e)	(0.9)	(1.1)	(0.1)
Disbursements for cash dividends		(=)	(0.1)
and treasury stock acquisition	(0.3)	(0.4)	(0.4)
Net cash flow before new debt	(1.3)	(0.3)	(0.9)
Long-term debt issued	0.8	0.5	1.0
(Decrease) Increase in cash and			
short-term investments	(0.5)	0.2	0.1
Cash and short-term investments			
at end of year	\$ 3.1	\$ 3.6	\$ 3.4

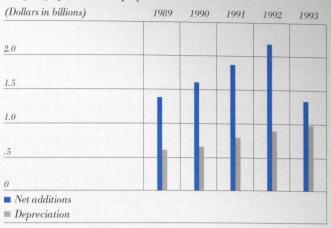
- (a) Cash flows from earnings as presented here are adjusted for non-cash charges for depreciation and retiree health care accruals. The Company has not funded Statement of Financial Accounting Standards No. 106 retiree health care accruals and at this time has no plan to fund these accruals in the future.
- (b) Facilities and equipment expenditures were at historic highs during 1991 and 1992, primarily in support of the new 777 program. Additionally, productivity investments and facilities expansions in support of the record commercial production rate levels in the 1991–1992 time period contributed substantially to these capital asset expenditures. Expenditures in 1993 were down sharply as the 777 program facilities expansions were substantially completed. Facilities and equipment expenditures are projected to continue to decline over the next two years.
- (c) The reduction in gross inventory in 1991 was primarily attributable to defense and space activities. During both 1992 and 1993, inventory balances on the 737, 747, 757 and 767 commercial jet transport programs declined substantially due to production rate reductions and improvements in production inventory flow times, offset by substantial inventory and tooling buildup on the new 777 program. Defense and space segment inventories also declined in 1993. Primarily because of declining delivery rates, slower order activity, and program buildup on the 777 program during 1992 and 1993, the ratio of commercial customer advances to commercial gross inventory declined. Consequently, the reductions in commercial gross inventory were more than offset by reductions in customer advances, resulting in a net cash requirement. With regard to defense and space contract activity, the ratio of progress billings to gross inventory did not significantly change during this period. Inventory buildup for the 777 program is projected to continue through mid-1995 when deliveries of the new 777 begin, partially offset by further reductions on the other commercial programs.

(d) Over the three-year period 1991-1993, changes in accounts receivable, accounts payable, other liabilities and deferred taxes required \$0.3 billion in cash flows in the aggregate. Reductions in customer advances in excess of related costs of \$0.9 billion over that threeyear period represented the largest individual negative cash flow factor. As of year end 1990, excess customer advances totaled \$1.1 billion, primarily associated with commercial aircraft order activity, and have been declining since that time. Offsetting this principal negative cash flow factor were the effects of reductions in accounts receivable and increases in accounts payable and other liabilities. Cash generated from reductions in accounts receivable totaled \$0.4 billion, principally associated with U.S. Government contract activity in 1992. Increases in accounts payable and other liabilities provided \$0.7 billion over the three-year period, primarily due to increased levels of lease and other deposits from customers.

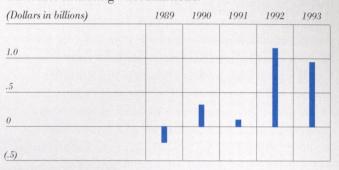
Federal income tax payments over the past several years have substantially exceeded the tax provisions on book income, due principally to certain tax law changes previously enacted, resulting in the acceleration of the recognition of taxable income related to long-term contracts and inventory costing. Federal income tax payments for the 1994–1995 time period are projected to exceed income tax expense by approximately \$1 billion as remaining contracts executed under prior tax regulations are completed.

(e) The increase in customer financing has been largely driven by the commercial aircraft market conditions discussed above. The Company has outstanding commitments of approximately \$4.0 billion to arrange or provide financing related to aircraft on order or under option. However, not all these commitments are likely to be utilized. The Company will sell a portion of customer financing assets from time to time when capital markets are favorable in order to maintain maximum capital resource flexibility. Outstanding loans and commitments are secured by the underlying aircraft.

Property, plant and equipment-net additions:



Customer financing-net additions:



#### **Liquidity and Capital Resources Summary**

The \$2.3 billion of long-term debt added over the prior three years is unsecured, with maturities ranging from 10 to 50 years. Total borrowings as of year end 1993 amounted to 23% of total book capital (shareholders' equity plus borrowings), and the Company believes that it has substantial additional long-term borrowing capability. A \$3.0 billion revolving credit line agreement with a group of major banks remains available, but unused.

In aggregate, cash and short-term investments are projected to decrease through mid-1995 due principally to the inventory buildup on the new 777 jet transport, customer financing commitments and federal income tax payments. No additional debt issuances are anticipated at this time.

The Company believes its internally generated liquidity, together with access to external capital resources, will be sufficient to satisfy existing commitments and plans, and to provide adequate financial flexibility to take advantage of potential strategic business opportunities should they arise.

#### **Contingent Items**

As discussed in Note 13 to the Consolidated Financial Statements, the U.S. Government has terminated for alleged default most of the work required under contracts for a new Saudi Arabia air defense system known as the Peace Shield program. The Government has demanded that the Company repay \$605 million of Peace Shield unliquidated progress payments and has selected another contractor to perform the terminated work. Management believes that the Government's grounds for default are not legally supportable, and on appeal the Government's position will be overturned. The Company has filed its complaint in the United States Claims Court to overturn the default termination, submitted a Contract Claim for equitable adjustment to the contract prices and schedules. and requested that repayment of \$605 million of unliquidated progress payments be deferred. The Company's financial statements assume that the termination for default will be overturned and that the Contract Claim will be settled in the Company's favor. If the Company's appeal of the termination for default is not successful, the Company could realize a pre-tax loss on the program approximating the value of the unliquidated progress payments plus related interest and potential damages.

The Company continues to be subject to ongoing U.S. Government investigations of business practices and cost classifications. These proceedings could involve claims by the Government for damages, and under certain circumstances a contractor can be suspended or debarred from Government contracts. The Company believes, based upon all available information, that the outcome of the Government investigations will not have a materially adverse effect on its financial position or results of operations.

The Company is subject to federal and state requirements for protection of the environment, including those for discharge of hazardous materials and remediation of contaminated sites. Due in part to their complexity and pervasiveness, such requirements have resulted in the Company being involved with related legal proceedings, claims and remediation obligations over the past 10 years. The costs incurred and expected to be incurred in connection with such activities have not had, and are not expected to have, a material impact to the Company's financial position. With respect to results of operations, related charges have averaged less than 2% of annual net earnings, and have not exceeded 3½% in any given year.

The Company routinely assesses, based on in-depth studies, expert analyses and legal reviews, its contingencies, obligations and commitments to clean up sites, including assessments of the probability of recoveries from other responsible parties who have and have not agreed to a settlement and recoveries from insurance carriers. The Company's policy is to immediately recognize identified exposures related to environmental cleanup sites based on conservative estimates of investigation, cleanup, and monitoring costs to be incurred.

Based on all known facts and expert analyses, the Company believes it is not reasonably likely that identified environmental contingencies will result in a materially adverse impact to the Company's financial position or operating results and cash flow trends.

# Report of Management

#### To the Shareholders of The Boeing Company:

The accompanying consolidated financial statements of The Boeing Company and subsidiaries have been prepared by management who are responsible for their integrity and objectivity. The statements have been prepared in conformity with generally accepted accounting principles and include amounts based on management's best estimates and judgments. Financial information elsewhere in this Annual Report is consistent with that in the financial statements.

Management has established and maintains a system of internal control designed to provide reasonable assurance that errors or irregularities that could be material to the financial statements are prevented or would be detected within a timely period. The system of internal control includes widely communicated statements of policies and business practices which are designed to require all employees to maintain high ethical standards in the conduct of Company affairs. The internal controls are augmented by organizational arrangements that provide for appropriate delegation of authority and division of responsibility and by a program of internal audit with management follow-up.

The financial statements have been audited by Deloitte & Touche, independent certified public accountants. Their audit was conducted in accordance with generally accepted auditing standards and included a review of internal controls and selective tests of transactions. The Independent Auditors' Report appears below.

The Audit Committee of the Board of Directors, composed entirely of outside directors, meets periodically with the independent certified public accountants, management and internal auditors to review accounting, auditing, internal accounting controls, litigation and financial reporting matters. The independent certified public accountants and the internal auditors have free access to this committee without management present.

Frank Shrontz
Chairman of the Board and
Chief Executive Officer

B.E. Givan
Senior Vice President and
Chief Financial Officer

T.M. Budinich
Vice President and
Controller

### **Independent Auditors' Report**

# Board of Directors and Shareholders, The Boeing Company:

We have audited the accompanying consolidated statements of financial position of The Boeing Company and subsidiaries as of December 31, 1993 and 1992, and the related statements of net earnings and cash flows for each of the three years in the period ended December 31, 1993. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of The Boeing Company and subsidiaries as of December 31, 1993 and 1992, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 1993, in conformity with generally accepted accounting principles.

As discussed in Note 1 to the financial statements, in 1992 the Company changed its method of accounting for postretirement benefits other than pensions.

Delsitte & Touche

Deloitte & Touche January 24, 1994 Seattle, Washington

# (Dollars in millions except per share data)

Year ended December 31,	1993	1992	100
Sales and other operating revenues			199
Costs and expenses	\$ 25,438	\$ 30,184	\$ 29,314
	23,747	28,144	27,360
Earnings from operations	1,691	2,040	1,954
Other income, principally interest	169	230	263
Interest and debt expense	(39)	(14)	(13
Earnings before federal taxes on income and		(11)	(13
cumulative effect of change in accounting	1.821	2.256	2 20 4
Federal taxes on income	577	2,256 702	2,204 637
Earnings before cumulative effect of change in accounting			
Cumulative effect to January 1, 1992, of change in accounting	1,244	1,554	1,567
for postretirement benefits other than pensions		(1.000)	
Net earnings		(1,002)	
9 · · · · · · · · · · · · · · · · · · ·	\$ 1,244	\$ 552	\$ 1,567
Earnings per share:			
Before cumulative effect of change in accounting	<b>60.</b> ( (	A	
Cumulative effect to January 1, 1992, of change in accounting	\$3.66	\$ 4.57	\$4.56
for postretirement benefits other than pensions		(0.00)	
		(2.95)	
	\$3.66	\$ 1.62	\$4.56
ash dividends per share	\$1.00	\$ 1.00	\$1.00

See notes to consolidated financial statements.

# **Consolidated Statements of Financial Position**

(Dollars in millions except per share data)

December 31,	1993	1992
Assets		
Cash and cash equivalents	\$ 2,342	\$ 2,711
Short-term investments	766	903
Accounts receivable	1,615	1,428
Current portion of customer financing	218	229
Deferred income taxes	800	115
Inventories	10,485	11,073
Less advances and progress billings	(7,051)	(8,372
Total current assets	9,175	8,087
Customer financing	2,959	2,066
Property, plant and equipment, at cost	13,232	12,293
Less accumulated depreciation	(6,144)	(5,569
Deferred income taxes	63	212
Other assets	1,165	1,058
	\$20,450	\$18,147
Liabilities and Shareholders' Equity		
Accounts payable and other liabilities	\$ 5,854	\$ 5,248
Advances in excess of related costs	226	639
Income taxes payable	434	232
Current portion of long-term debt	17	21
Total current liabilities	6,531	6,140
Accrued retiree health care	2,148	2,004
Long-term debt	2,613	1,772
Contingent stock repurchase commitment	175	175
Shareholders' equity:		
Common shares, par value \$5.00 -		
600,000,000 shares authorized;		
349,256,792 shares issued	1,746	1,746
Additional paid-in capital	413	418
Retained earnings	7,180	6,276
Less treasury shares, at cost -		
1993 – 9,118,995; 1992 – 9,836,313	(356)	(384
Total shareholders' equity	8,983	8,056
	\$20,450	\$18,147

 $See\ notes\ to\ consolidated\ financial\ statements.$ 

#### (Dollars in millions)

(Dollars in millions)			
Year ended December 31,	1993	1992	199
Cash flows — operating activities:			1//
Net earnings	\$ 1,244	\$ 552	\$ 1,567
Adjustments to reconcile net earnings to net cash		Ψ 002	φ 1,30
provided by operating activities:			
Effect of cumulative change in accounting			
for postretirement benefits other than pensions		1,002	
Depreciation and amortization -		1,002	
Plant and equipment	953	870	760
Leased aircraft, other	72	91	768
Deferred income taxes	(536)	(26)	58
Gain/undistributed earnings – affiliates	(1)		95
Changes in operating assets and liabilities -	(1)	(13)	1
Accounts receivable	(187)	635	/41
Inventories, net of advances and progress billings	(733)		(41)
Accounts payable and other liabilities	606	(138)	458
Advances in excess of related costs	(413)	229	(140)
Federal taxes on income	202	(28)	(416)
Change in prepaid pension expense	(134)	206	(453)
Change in accrued retiree health care	144	(202) 184	(403)
Net cash provided by operating activities	1,217	3,362	40
Cash flows — investing activities:	1,211	3,302	1,534
Short-term investments	137	(200)	(22
Customer financing additions	(1,560)	(388)	623
Customer financing reductions	626	(1,156)	(223)
Plant and equipment, net additions	(1,317)	16	123
Proceeds from sale of affiliate	(1,011)	(2,160)	(1,850)
Other	8	50	
Net cash used by investing activities		(19)	(3)
	(2,106)	(3,657)	(1,330)
Cash flows — financing activities:			
Debt financing	837	482	993
Shareholders' equity—			770
Cash dividends paid	(340)	(340)	(343)
Treasury shares acquired		(109)	(127)
Stock options exercised, other	23	35	23
Net cash provided by financing activities	520	68	546
Net increase (decrease) in cash and cash equivalents	(369)	(227)	
Cash and cash equivalents at beginning of year	2,711	2,938	750 2,188
Cash and cash equivalents at end of year	\$ 2,342	\$ 2,711	\$ 2,938
	18 11		¥ <b>2</b> ,700

See notes to consolidated financial statements.

#### **Notes to Consolidated Financial Statements**

Years ended December 31, 1993, 1992 and 1991 (Dollars in millions except per share data)

#### Note 1

## **Summary of Significant Accounting Policies**

#### Principles of consolidation

The consolidated financial statements include the accounts of all subsidiaries. Intercompany profits, transactions and balances have been eliminated in consolidation.

#### Sales and other operating revenues

Sales under commercial programs and U.S. Government and foreign military fixed-price contracts are generally recorded as deliveries are made. For certain fixed-price contracts that require substantial performance over a long time period before deliveries begin, sales are recorded based upon attainment of scheduled performance milestones. Sales under cost-reimbursement contracts are recorded as costs are incurred and fees are earned. Certain U.S. Government contracts contain profit incentives based upon performance as compared to predetermined targets. Incentives based on cost are recorded currently. Other incentives are included in revenues when awards or penalties are established, or when amounts can reasonably be determined. Income associated with customer financing activities is included in sales and other operating revenues.

#### Inventories and cost of deliveries

Inventoried costs on long-term commercial programs and U.S. Government and foreign military contracts include direct engineering, production and tooling costs, and applicable overhead. In addition, for U.S. Government fixed-price-incentive contracts, inventoried costs include research and development and general and administrative expenses estimated to be recoverable. Inventoried costs are generally reduced by the estimated average cost of deliveries.

For mature commercial programs, average cost of deliveries is based on the estimated total cost of units committed to production. For commercial programs in the early production stages, average cost of deliveries is based on the estimated total cost of units representing what is believed to be a conservative market projection. For U.S. Government and foreign military contracts, average cost of

deliveries is based on the estimated total cost of contractual units. To the extent the total of such costs is expected to exceed the total estimated sales price, charges are made to current earnings to reduce inventoried costs to estimated realizable value.

In accordance with industry practice, inventoried costs include amounts relating to programs and contracts with long production cycles, a portion of which is not expected to be realized within one year.

Commercial spare parts and general stock materials are stated at average cost not in excess of realizable value.

# Research and development, general and administrative expenses

Research and development (including the Companysponsored share of research and development activity conducted in connection with cost-share contracts) and general and administrative expenses are charged directly to earnings as incurred except to the extent estimated to be directly recoverable under U.S. Government flexibly priced contracts.

#### Interest expense

Interest and debt expense is presented net of amounts capitalized. Interest expense is subject to capitalization as a construction-period cost of property, plant and equipment and major commercial program tooling.

#### Postretirement benefits

The Company's funding policy for pension plans is to contribute, at a minimum, the statutorily required amount to an irrevocable trust. Benefits under the plans are generally based on years of credited service, age at retirement and average of last five years' earnings. The actuarial cost method used in determining the net periodic pension cost is the projected unit credit method.

In the fourth quarter of 1992, the Company adopted retroactive to January 1, 1992, the provisions of Statement of Financial Accounting Standards (SFAS) No. 106, Employers' Accounting for Postretirement Benefits Other Than Pensions, using the immediate recognition transition

option. SFAS No. 106 requires accrual of these benefits during an employee's service period. Prior to 1992, post-retirement benefits consisting of retiree health care were accrued for eligible retirees and qualifying dependents. The effect of the immediate recognition of the transition obligation was a decrease to 1992 earnings on an after-tax basis of \$1,002, or \$2.95 per share based on the annual average shares outstanding. This accounting change increased 1992 pre-tax costs by \$123. The retiree health care obligation is unfunded.

#### Taxes on income

In 1992, the Company adopted the provisions of Statement of Financial Accounting Standards (SFAS) No. 109, Accounting for Income Taxes. Under the asset and liability method prescribed by SFAS No. 109, deferred income taxes are provided for the temporary differences between the financial reporting basis and the tax basis of assets and liabilities. These deferred taxes are measured by the provisions of currently enacted tax laws. Because the Company had previously adopted SFAS No. 96, the adoption of SFAS No. 109 does not have a material effect on the Consolidated Statements of Net Earnings.

State taxes on income, which are relatively minor in amount, are included in general and administrative expense.

## Cash and short-term investments

Cash and cash equivalents consist of highly liquid instruments such as certificates of deposit, time deposits, treasury notes and other money market instruments which generally have maturities of less than three months. Short-term investments are carried at cost, which approximates market value.

#### Capital assets

Property, plant and equipment are recorded at cost and depreciated over useful lives, principally by accelerated methods. Applicable interest costs are capitalized with respect to plant and equipment additions.

# Contingent stock repurchase commitment

The Company has issued put options on 5,000,000 shares of its stock, exercisable on specific dates in 1994, giving another party the right to sell shares of Boeing stock to the Company at contractually specified prices. The balance of the temporary equity account is the amount the Company would be obligated to pay if all the put options were exercised. The proceeds from the issuance of the put options were accounted for as paid-in capital.

#### Per share data

Net earnings per share are computed based on the weighted average number of shares outstanding of 339,736,640, 340,217,888 and 343,355,917 for the years ended December 31, 1993, 1992 and 1991, respectively. There is no material dilutive effect on net earnings per share due to common stock equivalents.

#### Note 2

#### **Accounts Receivable**

Accounts receivable at December 31 consisted of the following:

	1993	1992
Amounts receivable under		
U.S. Government contracts	\$1,182	\$1,035
Accounts receivable from commercial		
and foreign military customers	433	393
	\$1,615	\$1,428

Accounts receivable included the following as of December 31, 1993 and 1992, respectively: amounts not currently billable of \$325 and \$209 (\$192 and \$132 not expected to be collected in one year) relating primarily to sales values recorded upon attainment of performance milestones that differ from contractual billing milestones and withholds on U.S. Government contracts; \$271 and \$241 (\$240 and \$192 not expected to be collected in one year) relating to claims and other amounts on U.S. Government contracts subject to future settlement; and \$57 and \$33 of other receivables not expected to be collected in one year.

#### Note 3

#### Inventories

Inventories at December 31, 1993 and 1992, consisted of \$9,557 and \$10,141 relating to long-term commercial programs and U.S. Government and foreign military contracts, and \$928 and \$932 relating to commercial spare parts, general stock materials and other inventories. General and administrative and research and development expenses included in inventories represented approximately 1% of total inventories.

All commercial jet transport programs except the 777 are being accounted for as mature programs as described in Note 1. As of December 31, 1993, there were no significant deferred production costs not recoverable from existing firm orders. Inventory costs relating to longterm commercial jet transport programs included net unamortized tooling of \$2,887 and \$1,646 at December 31, 1993 and 1992; of these amounts, \$2,299 and \$867 related to the 777 program. For mature commercial programs, substantially all of such costs will be amortized over existing firm orders. For the 777 program, the number of units for determining production costs in excess of aggregate estimated average cost and over which total tooling costs will be amortized and absorbed in cost of sales will be established when deliveries commence. As of January 24, 1994, 134 777s were under firm contract.

Additionally, as of December 31, 1993 and 1992, inventory balances included \$457 and \$581 subject to claims or other uncertainties related to U.S. Government contracts, principally for the Peace Shield program. (See Note 13.)

Interest capitalized as construction-period tooling costs amounted to \$50 and \$53 in 1993 and 1992.

#### Note 4

#### **Customer Financing**

Long-term customer financing, less current portion, at December 31 consisted of the following:

	1993	1992
Notes receivable	\$1,396	\$1,305
Investment in sales-type/		
financing leases	768	111
Operating lease aircraft, at cost,		
less accumulated depreciation		
of \$220 and \$168	895	720
	3,059	2,136
Less valuation allowance	(100)	(70
	\$2,959	\$2,066

Financing for aircraft is collateralized by security in the related asset, and historically the Company has not experienced a problem in accessing such collateral. The operating lease aircraft category includes new and used jet and commuter aircraft, spare engines and spare parts.

Principal payments from notes receivable and sales-type/financing leases for the next five years are as follows:

1994	1995	1996	1997	1998	
\$218	\$377	\$86	\$46	\$55	

Certain notes currently bear interest at fixed rates of 7.9% to 10.3%, while the remainder are at variable interest rates up to 1.75% above the prime rate.

Sales and other operating revenues included interest income associated with notes receivable and sales-type/financing leases of \$153, \$57 and \$46 for 1993, 1992 and 1991, respectively.

#### Note 5

#### **Property, Plant and Equipment**

Property, plant and equipment at December 31 consisted of the following:

	1993	1992
Land	\$ 397	\$ 399
Buildings	5,286	4,193
Machinery and equipment	6,500	6,084
Construction in progress	1,049	1,617
	\$13,232	\$12,293

Interest capitalized as construction-period property, plant and equipment costs amounted to \$100, \$66 and \$44 in 1993, 1992 and 1991, respectively.

#### Note 6

#### Taxes on Income

In 1992, the Company adopted the provisions of Statement of Financial Accounting Standards (SFAS) No. 109, Accounting for Income Taxes. State taxes on income, which are relatively minor in amount, are included in general and administrative expense.

The provision for federal taxes on income consisted of the following:

Year ended December 31,	1993	1992	1991
Taxes paid or currently payable	\$1,113	\$ 728	\$ 542
Change in deferred taxes			
other than SFAS No. 106			
cumulative transition effect	(536)	(26)	109
Amortization of investment credit			(14)
	\$ 577	\$ 702	\$ 637

The provisions for federal taxes on income were less than those which result from application of the statutory corporate tax rates due to the following:

	1993	1992	1991
Statutory tax rate	35.0%	34.0%	34.0%
Foreign Sales Corporation			
tax benefit	(3.3)	(3.8)	(3.2)
Rate change impact on	` '	()	(0)
deferred balances	(0.5)		
Research benefit			(1.8)
Amortization of investment credit			(0.6)
Other	0.5	0.9	0.5
Effective tax rate	31.7%	31.1%	28.9%

The research benefit recognized in 1991 related to benefits earned in prior years.

The net deferred tax assets (liabilities) resulted from temporary tax differences associated with the following:

Year ended December 31,	1993	1992	1991
Inventory and long-term			
contract methods of			
income recognition	\$ 381	\$(182)	\$(199)
Postretirement benefits accruals	429	393	(118)
Employee benefits accruals	223	215	203
Customer financing	(158)	(76)	(67)
Domestic International			
Sales Corporation	(12)	(23)	(34)
	\$863	\$ 327	\$(215)

The temporary tax difference associated with inventory and long-term contract methods of income recognition encompasses related costing differences, including timing and depreciation differences.

A valuation allowance was not required due to the nature of and circumstances associated with the temporary tax differences.

Income taxes have been settled with the Internal Revenue Service for all years through 1978. It is the Company's position that adequate provision has been made for all amounts due for the years 1979 through 1993. Federal income tax payments and transfers were \$908, \$518 and \$993 in 1993, 1992 and 1991, respectively.

#### Note 7

#### Other Assets

Other assets at December 31 consisted of the following:

	\$1,165	\$1,058	
Investments and other assets	184	21	
Prepaid pension expense	\$ 981	\$ 847	
	1993	1992	

#### Note 8

#### **Accounts Payable and Other Liabilities**

Accounts payable and other liabilities at December 31 consisted of the following:

1993	1992
\$2,731	\$2,869
1,005	997
708	275
1,410	1,107
\$5,854	\$5,248
	\$2,731 1,005 708 1,410

#### Note 9

#### **Long-Term Debt**

Long-term debt at December 31 consisted of the following:

		1993		1992
Unsecured debentures and notes:				
83/8% due Mar. 1, 1996	\$	249	\$	249
6.35% due Jun. 15, 2003		299		
8½10% due Nov. 15, 2006		175		175
8¾% due Aug. 15, 2021		398		398
7.95% due Aug. 15, 2024		300		300
71/4% due Jun. 15, 2025		247		
8¾% due Sep. 15, 2031		248		248
85/8% due Nov. 15, 2031		173		173
7.865% due Aug. 15, 2042		100		100
71/8% due Apr. 15, 2043		173		
61/8% due Oct. 15, 2043		125		
Other notes		143		150
Less current portion		(17)		(21)
	\$2	2,613	\$ 1	,772

The \$300 debentures due August 15, 2024, are redeemable at the holder's option on August 15, 2012. All other debentures and notes are not redeemable prior to maturity. The \$100 notes due August 15, 2042, were issued to a private investor, and the interest rate of 7.865% is a synthetic rate reflecting the effect of interest rate swaps simultaneously entered into with the private investor. Maturities of long-term debt for the next five years are as follows:

1994	1995	1996	1997	1998	
\$17	\$13	\$269	\$9	\$11	

Interest payments were \$175, \$120 and \$32 in 1993, 1992 and 1991, respectively.

The Company has a \$3,000 credit line currently available under an agreement with a group of commercial banks. Under this agreement, there are compensating balance arrangements, and retained earnings totaling \$1,186 are free from dividend restrictions. The Company has complied with restrictive covenants contained in the various debt agreements.

#### Postretirement Plans

#### **Pensions**

The Company has various noncontributory plans covering substantially all employees. All major plans are funded and have plan assets that exceed accumulated benefit obligations. The following table reconciles the plans' funded status to the prepaid expense balance at December 31.

		1993	1992
Actuarial present value of benefit obligations:			
Vested		\$ (7,196)	\$ (6,081
Nonvested		(547)	(436
Accumulated benefit obligation		(7,743)	(6,517
Effect of projected future salary increases		(1,299)	(1,397
Projected benefit obligation		(9,042)	(7,914)
Plan assets at fair value - primarily equities, fixed income		(9,042)	(1,914)
obligations and cash equivalents		9,180	8,326
Plan assets in excess of projected benefit obligation		138	412
Unrecognized net actuarial loss		467	139
Unrecognized prior service cost		476	410
Unrecognized net asset at January 1, 1987, being recognized over the plans'		110	710
average remaining service lives		(100)	(114)
Prepaid pension expense recognized in the Consolidated Statements of		(100)	(111)
Financial Position		\$ 981	\$ 847
The pension provision included the following components:			
Year ended December 31,	1993	1992	1991
Service cost (current period attribution)	\$ 307	\$ 293	\$ 299
Interest accretion on projected benefit obligation	632	594	561
Actual return on plan assets	(923)	(483)	(972)
Net deferral and amortization of actuarial losses (gains)	257	(140)	427
Net pension provision	\$ 273	\$ 264	\$ 315

The actuarial present value of the projected benefit obligation at December 31, 1993, 1992 and 1991, respectively, was determined using a weighted average discount rate of 7.25%, 8.25% and 8.25%, and a rate of increase in future compensation levels of 5.0%, 6.0% and 6.0%. The expected long-term rate of return on plan assets was 8.5% at December 31, 1993, 1992 and 1991.

The pension plans have been amended to provide that, in the event there is a change in control of the Company which is not approved by the Board of Directors and the plans are terminated within five years thereafter, the assets in the plans first will be used to provide the level of retirement benefits required by the Employee Retirement

Income Security Act, and then any surplus will be used to fund a trust to continue present and future payments under the postretirement medical and life insurance benefits in the Company's group insurance programs.

Although the Company has no intention of doing so, should it terminate certain of its pension plans under conditions where the plan's assets exceed the plan's obligations, the Company has an agreement with the Government whereby the Government is entitled to a fair allocation of any of the plan's reverted assets based on plan contributions that were reimbursed under Government contracts. Also, the Revenue Reconciliation Act of 1990 imposes a 20% nondeductible excise tax on the gross assets reverted if the Company establishes a qualified

replacement plan or amends the terminating plan to provide for benefit increases; otherwise, a 50% tax is applied. Any net amount retained by the Company is treated as taxable income.

The Company has certain unfunded and partially funded plans with a projected benefit obligation of \$169 and \$109; plan assets of \$23 and \$0; and unrecognized prior service costs and actuarial losses of \$70 and \$46 as of December 31, 1993 and 1992, respectively, based on actuarial assumptions consistent with the funded plans. The net provision for the unfunded plans was \$22 and \$15 for 1993 and 1992.

The principal defined contribution plans are the Company-sponsored 401(k) plans and a funded plan for unused sick leave. Under the terms of the Company-sponsored 401(k) plans, eligible employees are allowed to contribute up to 12% of their base pay. The Company contributes amounts equal to 50% of the employee's contribution to a maximum of 4% of the employee's pay, subject to statutory limitations. The provision for these defined contribution plans in 1993, 1992 and 1991 was \$213, \$221 and \$205, respectively.

#### Other postretirement benefits

In the fourth quarter of 1992, the Company adopted retroactive to January 1, 1992, the provisions of Statement of Financial Accounting Standards (SFAS) No. 106, Employers' Accounting for Postretirement Benefits Other Than Pensions, using the immediate recognition transition option. SFAS No. 106 requires accrual of these benefits during an employee's service period. Prior to 1992, postretirement benefits were accrued for eligible retirees upon retirement. The Company's postretirement benefits other than pensions consist of health care coverage for eligible retirees and qualifying dependents. Except for employees covered by the United Auto Workers bargaining agreement for whom lifetime benefits are provided, retiree health care is provided principally until age 65. At January 1, 1992, the accumulated postretirement benefit obligation was \$1,819; however, \$301 of this obligation had been previously accrued, resulting in a pre-tax transition obligation adjustment of \$1,518. The effect of the immediate recognition of the transition obligation was a decrease to first quarter 1992 net earnings of \$1,002 and a deferred tax benefit of \$516.

The retiree health care cost provision was \$230, \$257 and \$105 for 1993, 1992 and 1991, respectively. The components of expense for 1993 and 1992 were as follows:

Year ended December 31,	1993	1992
Service cost (current period attribution)	\$ 92	\$110
Interest accretion on accumulated postretirement benefit obligation	144	147
Net deferral and amortization of		
actuarial gains	(6)	
Net provision for retiree health care	\$230	\$257

Benefit costs were calculated based on assumed cost growth for retiree health care costs of a 12.0% annual rate for 1994, decreasing to a 5.25% annual growth rate by the year 2003. A 1% increase or decrease in the assumed annual trend rates would increase or decrease the accumulated postretirement benefit obligation by \$218 and \$227 as of December 31, 1993 and 1992, with a corresponding effect on the postretirement benefit expense of \$39 and \$43 for 1993 and 1992. The accumulated postretirement benefit obligation at December 31, 1993 and 1992, was determined using a weighted average discount rate of 7.25% and 8.25%.

The accumulated postretirement benefit obligation at December 31 consisted of the following components:

	1993	1992
Retirees and dependents	\$ 534	\$ 485
Fully eligible active plan participants	364	358
Other active plan participants	923	872
Total accumulated postretirement		
benefit obligation	1,821	1,715
Unrecognized net actuarial gain	327	289
Accrued postretirement		
benefit obligation	\$2,148	\$2,004

#### Note 11

## Research and Development, General and Administrative Expenses

Expenses charged directly to earnings as incurred included the following:

Year ended December 31,	1993	1992	1991
Research and development	\$1,661	\$1,846	\$1,417
General and administrative	1,102	1,232	1,291

Note 12

# Shareholders' Equity

Changes in shareholders' equity consisted of the following:

	Commo	Common Stock			Treasury Stock	
(Shares in thousands)	Shares	Par Value	Paid-In Capital	Retained Earnings	Shares	Amount
Balance, December 31, 1990	349,257	\$ 1,746	\$ 581	\$ 4,840	5,683	\$ (194)
Net earnings				1,567		
Cash dividends paid				(343)		
Treasury shares acquired					2,915	(127)
Treasury shares issued for stock options			(5)		(629)	21
Tax benefit related to stock options			3			
Stock appreciation rights expired						
or surrendered			4			
Balance, December 31, 1991	349,257	\$ 1,746	\$ 583	\$ 6,064	7,969	\$ (300)
Net earnings				552		
Cash dividends paid				(340)		
Treasury shares acquired					2,497	(109)
Treasury shares issued for stock options			(10)		(630)	25
Tax benefit related to stock options			4			
Cash received on put options			15			
Transfer to contingent stock						
repurchase provision			(175)			
Stock appreciation rights expired						
or surrendered			1			
Balance, December 31, 1992	349,257	\$ 1,746	\$ 418	\$ 6,276	9,836	\$ (384)
Net earnings				1,244		
Cash dividends paid				(340)		
Treasury shares issued for stock options			(11)		(717)	28
Tax benefit related to stock options			3			
Stock appreciation rights expired						
or surrendered			3			
Balance, December 31, 1993	349,257	\$ 1,746	\$ 413	\$ 7,180	9,119	\$ (356)

In July 1987, the Company adopted a Stockholder Rights Plan and declared a dividend distribution of one Right for each outstanding share of common stock. Under certain conditions, each Right may be exercised to purchase one one-hundredth of a share of Series A Junior Participating Preferred Stock at a purchase price of \$150, subject to adjustment. The Rights will be exercisable only if a person or group has acquired, or obtained the right to acquire, 20% or more of the outstanding shares of common stock; following the commencement of a tender or exchange offer for 30% or more of such outstanding shares of common stock; or after the Board of Directors of the Company declares any person, alone or together with affiliates and associates, to be an Adverse Person. If the Board of Directors declares an Adverse Person, or a person or group acquires more than 30% of the then outstanding shares of common stock (except pursuant to an offer which the independent Directors determine to be fair to and otherwise in the best interests of the Company and its shareholders), each Right will entitle its holder to receive, upon exercise, common stock (or, in certain circumstances, cash, property or other securities of the Company) having a value equal to two times the exercise price of the Right. The Company will be entitled to redeem the Rights at 5 cents per Right at any time prior to the earlier of the expiration of the Rights in August 1997 or ten days following the time that a person has acquired or obtained the right to acquire a 20% position. The Company may not redeem the Rights if the Board of Directors has previously declared a person to be an Adverse Person. The Rights do not have voting or dividend rights, and until they become exercisable, have no dilutive effect on the earnings of the Company.

Changes in stock options and stock appreciation rights (SARs), issued to officers and other employees at exercise prices equal to market value of the stock at grant date, consisted of the following:

(Shares in thousands) Year ended December 31,	1993	1992	1991
Number of shares under option:			
Outstanding at beginning			
of year	12,001	8,123	7,526
Granted	2,531	4,748	1,597
Exercised	(743)	(630)	(630
Cancelled or expired	(278)	(98)	(69
Exercised as SARs	(246)	(142)	(301)
Outstanding at end of year	13,265	12,001	8,123
Exercisable at end of year	5,715	4,985	4,488
Stock appreciation rights:			
Outstanding at end of year	1,703	2,174	2,398
Exercisable at end of year	1,480	1,658	1,660
Number of shares authorized for			
future stock option grants at			
end of year	16,695	5,513	10,166

The ranges of exercise prices per share for options outstanding were as follows:

December 31,	1993	1992	199
High	\$60.06	\$60.06	\$60.06
Low	\$12.63	\$10.70	\$ 5.56

The Company has authorized 10,000,000 shares of \$1 par preferred stock, none of which has been issued.

## Note 13

#### Contingencies

Various legal proceedings, claims and investigations are pending against the Company related to products, contracts and other matters. Except for the items discussed below, most of these legal proceedings are related to matters covered by insurance.

In January 1991, the Company received from the U.S. Government a notice of partial termination for default which terminated most of the work required under contracts to develop and install a new air defense system for Saudi Arabia, known as the Peace Shield program. The Government has filed with the Company a demand for repayment of \$605 of Peace Shield unliquidated progress payments plus interest commencing January 25, 1991. In February 1991, the Company submitted a request for a deferred payment agreement which, if granted, would formally defer the Company's potential obligation to repay the \$605 of unliquidated progress payments until the conclusion of the appeal process. In June 1991, the Government selected another contractor to perform the work which is the subject of the contracts that have been terminated for default, and the Government will likely assert claims related to the reprocurement. The Company does not expect the Government to assert such claims prior to completion of the reprocurement contract, which was originally scheduled for late 1995.

Management's position, supported by outside legal counsel which specializes in government procurement law, is that the grounds for default asserted by the Government in the Peace Shield termination are not legally supportable. Accordingly, management and counsel are of the opinion that on appeal the termination for default has a substantial probability of being converted to termination for the convenience of the Government, which would eliminate any Government claim for cost of reprocurement or other damages. Additionally, the Company has a legal basis for a claim for equitable adjustment to the prices and schedules of the contracts (the "Contract Claim"). Many of the same facts underlie both the Contract Claim and the Company's appeal of the Government's termination action. The Company has filed its complaint in the United States Claims Court to overturn the default termination in order to obtain payment of the Contract Claim. The parties

are currently litigating jurisdictional issues related to the complaint, and are engaged in discovery. Trial is currently scheduled for March 1997. The Company expects that its position will ultimately be upheld with respect to the termination action and that it will prevail on the Contract Claim.

The Company's financial statements have been prepared on the basis of a conservative estimate of the revised values of the Peace Shield contracts including the Contract Claim and the Company's position that the termination was for the convenience of the Government. At this time, the Company cannot reasonably estimate the length of time that will be required to resolve the termination appeal and the Contract Claim. In the event that the Company's appeal of the termination for default is not successful, the Company could realize a pre-tax loss on the program approximating the value of the unliquidated progress payments plus related interest and potential damages assessed by the Government.

The Company is subject to several U.S. Government investigations of business and cost classification practices. One investigation involves a grand jury proceeding as to whether or not certain costs were charged to the proper overhead accounts. No charges have been filed in this matter, and based on the facts known to it, the Company believes it would have defenses if any were filed. The investigations could result in civil, criminal or administrative proceedings. Such proceedings, if any, could involve claims by the Government for fines, penalties, compensatory and treble damages, restitution and/or forfeitures. Based upon Government procurement regulations, a contractor, or one or more of its operating divisions or subdivisions, can also be suspended or debarred from Government contracts if proceedings result from the investigations. The Company believes, based upon all available information, that the outcome of Government investigations will not have a materially adverse effect on its financial position or results of operations.

The Company is subject to federal and state requirements for protection of the environment, including those for discharge of hazardous materials and remediation of contaminated sites. Due in part to their complexity and pervasiveness, such requirements have resulted in the Company being involved with related legal proceedings, claims and remediation obligations over the past 10 years.

The Company routinely assesses, based on in-depth studies, expert analyses and legal reviews, its contingencies, obligations and commitments for remediation of contaminated sites, including assessments of ranges and probabilities of recoveries from other responsible parties who have and have not agreed to a settlement and recoveries from insurance carriers. The Company's policy is to immediately accrue and charge to current expense identified exposures related to environmental remediation sites based on conservative estimates of investigation, cleanup and monitoring costs to be incurred.

The costs incurred and expected to be incurred in connection with such activities have not had, and are not expected to have, a material impact to the Company's financial position. With respect to results of operations, related charges have averaged less than 2% of annual net earnings. Such accruals as of December 31, 1993, without consideration for the related contingent recoveries from insurance carriers, are less than 2% of total liabilities.

Based on all known facts and expert analyses, the Company believes it is not reasonably likely that identified environmental contingencies will result in additional costs that would have a materially adverse impact to the Company's financial position or operating results and cash flow trends.

#### Note 14

#### **Industry Segment Information**

The Company operates in two principal industries: Commercial Aircraft, and Defense and Space. Commercial Aircraft operations principally involve development, production and marketing of commercial jet transports and providing related support services, principally to the commercial airline industry. Defense and Space operations involve research, development, production, modification and support of military aircraft and related systems, space systems and missile systems. No single product line in the Defense and Space segment represented more than 10% of consolidated revenues, operating profits or identifiable assets.

Foreign sales by geographic area consisted of the following:

Year ended December 31,	1993	1992	1991
Asia	\$ 8,870	\$ 7,108	\$ 5,458
Europe	4,698	7,165	8,745
Oceania	635	1,911	1,659
Africa	264	430	558
Western Hemisphere	149	872	1,436
	\$14,616	\$17,486	\$17,856

Defense sales were approximately 6%, 3% and 5% of total sales in Europe for 1993, 1992 and 1991, respectively. Defense sales were approximately 2%, 5% and 5% of total sales in Asia for 1993, 1992 and 1991, respectively. Exclusive of these amounts, Defense and Space sales were principally to the U.S. Government.

Financial information by segment for the three years ended December 31, 1993, is summarized on page 52. Corporate income consists principally of interest income from corporate investments. Corporate expense consists of noncapitalized interest on debt and other general corporate expenses. Corporate assets consist principally of cash, cash equivalents, short-term investments and deferred income taxes.

Year ended December 31,	1993	1992	1991
Revenues			
Commercial Aircraft	\$20,568	\$24,133	\$22,970
Defense and Space	4,407	5,429	5,846
Other industries	463	622	498
Operating revenues	25,438	30,184	29,314
Corporate income	169	230	263
Total revenues	\$25,607	\$30,414	\$29,577
Operating profit			
Commercial Aircraft	\$ 1,646	\$ 1,990	\$ 2,246
Defense and Space	219	204	(102)
Other industries	16	27	(2)
Operating profit	1,881	2,221	2,142
Corporate income	169	230	263
Corporate expense	(229)	(195)	(201)
Earnings before taxes	\$ 1,821	\$ 2,256	\$ 2,204
Identifiable assets at December 31			
Commercial Aircraft	\$12,686	\$10,178	\$ 7,806
Defense and Space	3,525	3,687	4,262
Other industries	202	264	196
	16,413	14,129	12,264
Corporate	4,037	4,018	3,660
Consolidated assets	\$20,450	\$18,147	\$15,924
Depreciation			
Commercial Aircraft	\$ 710	\$ 598	\$ 484
Defense and Space	230	241	269
Other industries	67	73	51
Total depreciation	\$ 1,007	\$ 912	\$ 804
Capital expenditures, net			
Commercial Aircraft	\$ 1,120	\$ 1,890	\$ 1,445
Defense and Space	164	212	317
Other industries	33	58	88
Total capital expenditures, net	\$ 1,317	\$ 2,160	\$ 1,850

#### Note 15

# Financial Instruments with Off-Balance-Sheet Risk

The Company is a party to financial instruments with off-balance-sheet risk in the normal course of business, principally relating to customer financing activities. Off-balance-sheet risk items include financing commitments, extensions of credit, credit guarantees, tax benefit transfers, foreign government expropriation guarantees, interest rate swaps, and agreements with other financing parties to participate in long-term receivables with interest rate terms different from those of the related receivable.

Irrevocable financing commitments related to aircraft on order, including options, scheduled for delivery through 2002 totaled \$3,963 as of December 31, 1993. The Company anticipates that not all of these commitments will be utilized and that it will be able to arrange for third-party investors to assume a portion of the remaining commitments, if necessary.

The Company's exposure to credit and market-related losses related to credit guarantees, tax benefit transfers, and foreign government expropriation guarantees totaled \$28 as of December 31, 1993.

The Company has entered into interest rate swaps with third-party investors whereby the interest rate terms differ from those of the original receivable. These interest rate swaps related to \$458 of customer financing receivables as of December 31, 1993. In addition, participation in customer financing receivables by third-party investors with interest rate terms different from the original receivable totaled \$83.

#### Note 16

# Significant Group Concentrations of Credit Risk

Substantially all financial instruments are with commercial airline customers and the U.S. Government. As of December 31, 1993, virtually all off-balance-sheet financial instruments described in Note 15 related to commercial aircraft customers. Of the \$3,897 in accounts receivable and customer financing receivables included in the Consolidated Statements of Financial Position, \$2,583 related to commercial aircraft customers and \$1,182 related to the U.S. Government. Financing for aircraft is collateralized by security in the related asset, and historically, the Company has not experienced a problem in accessing such collateral.

#### Note 17

# Disclosures about Fair Value of Financial Instruments

The carrying values of cash equivalents and short-term investments are representative of fair value because of the short maturity of those instruments.

Certain receivable balances will be collected over an extended period; consequently, the fair value of accounts receivable is estimated to be lower than the carrying value by \$60 and \$50 as of December 31, 1993 and 1992, reflecting a discounted value due to deferred collection. The carrying value of accounts payable is estimated to approximate fair value.

There are generally no quoted market prices available for customer financing notes receivable. The net fair value of such notes is estimated to approximate the net carrying value based upon interest rates and risk-related rate spreads as of December 31, 1993.

The carrying amount of long-term debt was \$2,630 and \$1,793 as of December 31, 1993 and 1992. The fair value of long-term debt, based on current market rates for debt of the same risk and maturities, was estimated at \$2,870 and \$1,880 as of December 31, 1993 and 1992. The Company's long-term debt, however, is generally not callable until maturity.

With regard to financial instruments with off-balancesheet risk, it is not practicable to estimate the fair value of future financing commitments, and all other off-balancesheet financial instruments are estimated to have only a nominal fair value. The terms and conditions reflected in the outstanding guarantees and commitments for financing assistance are not materially different from those that would have been negotiated as of December 31, 1993.

# Quarterly Financial Data (Unaudited)

(Dollars in millions except per share data)

			1993				1992	
Quarter	4th	3rd	2nd	lst	4th	3rd	2nd	lst
Sales and other operating revenues	\$5,656	\$5,153	\$7,985	\$6,644	\$7,497	\$6,897	\$7,823	\$ 7,967
Earnings from operations	434	246	581	430	476	440	573	551
Net earnings (loss):								
Before cumulative effect								
of accounting change	304	189	426	325	357	345	432	420
Cumulative effect of						010	102	420
accounting change								(1,002)
	304	189	426	325	357	345	432	(582)
Net earnings (loss) per share:					001	010	102	(302)
Before cumulative effect								
of accounting change	.89	.56	1.25	.96	1.05	1.02	1.27	1.23
Cumulative effect of					1.00	1.02	1.21	1.25
accounting change								(2.94)
	.89	.56	1.25	.96	1.05	1.02	1.27	(1.71)
Cash dividends per share	.25	.25	.25	.25	.25	.25	.25	.25
Market price:								
High	44.75	40.75	41.00	40.88	40.25	42.13	47.50	54.63
Low	35.50	36.25	34.25	33.38	33.13	34.13	38.63	43.38
Quarter end	43.25	38.38	37.00	35.00	40.13	36.75	39.88	43.88

## **Five Year Summary**

(Dollars in millions except per share data) (Share data restated for applicable stock splits)

	1993	1992	1991	1990	1989	
Operations						
Sales and other operating revenues						
Commercial Aircraft	\$20,568	\$24,133	\$22,970	\$21,230	\$14,305	
Defense and Space	4,407	5,429	5,429 5,846		5,429 542	
Other industries	463	622 498		503		
Total	. 25,438	30,184	29,314	27,595	20,276	
Net earnings	1,244	1,554**	1,567	1,385	675*	
Per share	3.66	4.57**	4.56	4.01	1.96*	
Percent of sales	4.9%	5.2%	5.3%	5.0%	3.30	
Cash dividends paid	\$ 340	\$ 340	\$ 343	\$ 328	\$ 269	
Per share	1.00	1.00	1.00	.95	.773	
Other income, principally interest	169	230	263	448	347	
Research and development expensed	1,661	1,846	1,417	827	754	
General and administrative expensed	1,102	1,232	1,291	1,246	1,066	
Additions to plant and equipment	1,317	2,160	1,850	1,586	1,362	
Depreciation of plant and equipment	953	870	768	636	584	
Salaries and wages	5,766	6,318	6,502	6,487	6,082	
Average employment	134,400	148,600	159,100	161,700	159,200	
Financial position at December 31						
Total assets	\$20,450	\$18,147	\$15,924	\$14,591	\$13,278	
Working capital	2,601	1,947	2,462	1,396	1,689	
Net plant and equipment	7,088	6,724	5,530	4,448	3,481	
Cash and short-term investments	3,108	3,614	3,453	3,326	1,863	
Total debt	2,630	1,793	1,317	315	280	
Customer financing	3,177	2,295	1,197	1,133	868	
Shareholders' equity	8,983	8,056	8,093	6,973	6,131	
Per share	26.41	23.74	23.71	20.30	17.73	
Common shares outstanding (in millions)	340.1	339.4	341.3	343.6	345.8	
Contractual backlog						
Commercial	\$70,497	\$82,649	\$92,826	\$91,475	\$73,974	
U.S. Government	3,031	5,281	5,090	5,719	6,589	
Total	\$73,528	\$87,930	\$97,916	\$97,194	\$80,563	

<sup>\*</sup> Exclusive of the cumulative effect of adopting Statement of Financial Accounting Standards No. 96, Accounting for Income Taxes. Net earnings including the effect were \$973 or \$2.82 per share.

Cash dividends have been paid on common stock every year since 1942.

<sup>\*\*</sup> Exclusive of the cumulative effect of adopting Statement of Financial Accounting Standards No. 106, Employers' Accounting for Postretirement Benefits Other Than Pensions. Net earnings including the effect were \$552 or \$1.62 per share.

#### **Board of Directors**

Robert A. Beck Chairman Emeritus The Prudential Insurance Company of America (insurance) Committees: Audit and Finance

Philip M. Condit President The Boeing Company

John B. Fery
Chairman of the Board & Chief Executive Officer
Boise Cascade Corporation
(wood and paper products)
Committees: Audit and Finance\*

Paul E. Gray Chairman of the Corporation Massachusetts Institute of Technology (education) Committees: Audit and Finance

Harold J. Haynes
Retired Chairman of the Board
& Chief Executive Officer
Chevron Corporation (petroleum products)
Committees: Compensation,
Organization and Nominating

Stanley Hiller, Jr.
Partner, Hiller Investment Company
(private investments)
Committees: Audit\* and Finance

George M. Keller
Retired Chairman of the Board
& Chief Executive Officer
Chevron Corporation (petroleum products)
Committees: Compensation,\*
Organization and Nominating

Donald E. Petersen
Retired Chairman of the Board
& Chief Executive Officer
Ford Motor Company (automobile manufacturer)
Committees: Compensation,
Organization and Nominating

Charles M. Pigott
Chairman of the Board & Chief Executive Officer
PACCAR Inc (transportation equipment)
Committees: Compensation,
Organization and Nominating\*

Rozanne L. Ridgway Co-Chair The Atlantic Council of the United States (association to promote understanding of international economic, political and security issues) Committees: Audit and Finance

Frank Shrontz Chairman of the Board & Chief Executive Officer The Boeing Company

George H. Weyerhaeuser Chairman of the Board Weyerhaeuser Company (forest products) Committees: Compensation, Organization and Nominating

#### **Corporate Officers**

Douglas P. Beighle Senior Vice President

Thomas M. Budinich, Jr. Vice President & Controller

Arlington W. Carter Vice President - Continuous Quality Improvement

Lawrence W. Clarkson Vice President - Planning & International Development

F.G. (Bud) Coffey Vice President - Government Affairs

Theodore J. Collins Vice President and General Counsel

Philip M. Condit President

Dennis J. Crispin Vice President -Employee Benefits, Insurance & Taxes

Deane D. Cruze Senior Vice President - Operations

Andre Gay Vice President - Facilities

Boyd E. Givan Senior Vice President & Chief Financial Officer

John F. Hayden Vice President - Washington, D.C., Office

Heather Howard Corporate Secretary & Corporate Counsel

David A. Jaeger Vice President & Treasurer

Larry G. McKean Vice President - Human Resources

Frank Shrontz Chairman of the Board & Chief Executive Officer

A.D. (Bert) Welliver Senior Vice President -Engineering & Technology

## **Operating Divisions**

Boeing Commercial Airplane Group

Ronald B. Woodard President

Richard R. Albrecht Executive Vice President

Robert L. Dryden Executive Vice President

Bruce Gissing Executive Vice President - Operations

Boeing Defense & Space Group

C. Gerald King President

John Schmit Senior Vice President - Operations

John B. Sheridan Senior Vice President - Engineering

#### **Boeing Computer Services**

John D. Warner President

# **Boeing Support Services**

Wallace E. Alder Vice President & General Manager

Please direct inquiries relating to the following subjects as indicated:

Public Relations and Advertising

Harold Carr Vice President Mail Stop 10-06

**Investor Relations** 

Larry Bishop Vice President Mail Stop 10-16

# Shareholder & Investor Information

The Boeing Company General Offices
7755 East Marginal Way South
Seattle, Washington 98108
(206) 655-2121

Shareholder Inquiries
Transfer Agent and Registrar
The First National Bank of Boston

Our transfer agent is responsible for our shareholder records, issuance of stock certificates, and distribution of our dividends and IRS Form 1099. Requests concerning these matters are most efficiently answered by corresponding directly with The First National Bank of Boston at the following address:

The Boeing Company c/o The First National Bank of Boston Mail Stop 45-02-09 P.O. Box 644 Boston, Massachusetts 02102-0644 Telephone: (617) 575-2900 or (800) 442-2001

Pre-recorded information concerning various shareholder account matters is available toll-free from Boeing Shareholder Services at (800) 457-7723.

Written inquiries may be sent to

The Boeing Company
Shareholder Services
Mrs. Michelle Hayes
P.O. Box 3707, Mail Stop 10-13
Seattle, Washington 98124-2207

#### Annual Meeting

The annual meeting of Boeing shareholders will be held in the auditorium of the Company's 2-22 building, located at 7755 East Marginal Way South, Seattle, Washington, on April 25, 1994. Formal notice of the meeting, proxy statement, form of proxy and annual report were mailed to shareholders starting about March 15, 1994.

#### Stock Exchange Listings

The company's common stock is traded principally on the New York Stock Exchange; the trading symbol is BA. Boeing common stock is also listed on the Amsterdam, Brussels, London, Swiss and Tokyo stock exchanges. Additionally, the stock is traded on the Boston, Cincinnati, Midwest and Philadelphia exchanges. The number of shareholders of record as of January 31, 1994, was 101,219.

#### **General Auditors**

Deloitte and Touche 700 Fifth Avenue, Suite 4500 Seattle, Washington 98104-5044 (206) 292-1800

<sup>\*</sup>Committee Chair

The Boeing Company General Offices 7755 East Marginal Way South Seattle, Washington 98108 BOEING

March 23, 1994

Mr. Russ Gullotti President, Americas Area Digital Equipment Corporation Digital Drive Merrimack, New Hampshire 30354

## Dear Russ:

It was good to see you again. I enjoyed the short time that we had discussing both business and fishing.

Thanks for the fine book of New England photography. Jen and I will get a chance to preview what we intend to take advantage of.

Bol falls arrold fines:

I look forward to seeing you again soon.

Sincerely,

S. C. Beckelman

Digital Equipment Corporation P.O. Box 92835 Bellevue, Washington 98009-2035 206.637.4000

# digital

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March 7, 1994

Mr. Dick Tennent Boeing Computer Services P.O. Box 24346 MS: 7L-15 Seattle, WA 98124-0346

#### Dear Mr. Tennent:

The following outlines Digital's strategy with regard to the OSF technologies outlined in a letter to Digital Americas Area President, Russ Gullotti dated February 16, 1994, from John Warner, President of Boeing Computer Services.

In response to that letter, the following status is provided for your review:

- 1. DME Distributed Services
  - a. License Management
  - b. Software Distribution
- 2. Network Management Option (NMO)
- 3. Object Management Framework (OMF)
- 4. Managed Object Definitions
- 5. OSF Motif 2.0
- 6. OSF DCE 1.1

Additionally, Digital's commitment of OSF was reinforced by Bill Strecker, V.P. of Engineering in a meeting with John Warner and other BCS Executives on February 24, 1994.

Please call me if you have any questions or need further information.

Sincerely,

J. Robert Tassone

Global Account Manager

**Boeing Business Group** 

(206) 637-4281

cc: Russ Gullotti, Digital John Warner, Boeing Sam McCandlish, Digital John Drenguis, Digital

# Digital Position on the Open Software Foundation (OSF)

#### 1. DME Distributed Services:

# Software License Management

Licensing technology on Digital platforms will be delivered in the second generation POLYCENTER Licensing System (PLS). Current plans are to have a PLS implementation on each of the three major operating systems before the end of calendar year 1994. We are working with other platform vendors to adopt our technology.

The OSF DME licensing services is an older, first generation licensing technology that has not been implemented to any great degree since the OSF DME technology submission over two years ago. The OSF licensing services are extracted from previous Gradient NetLS technology that has since evolved into a new Gradient iFOR solution, with new features not included in the OSF DME technology.

In addition, the OSF DME license services must address the emerging industry standard License Service Application Protocol Interface (LSAPI). This particular standard is critically important to all software publishing houses that want to utilize licensing technology. LSAPI allows vendors to code license server calls into their applications just one time. Any and all license servers that implement the LSAPI standard would then be able to respond to the selected applications call for a software license (terms and conditions).

The LSAPI standard is supported by all the major vendors in the licensing technology business (Microsoft, Digital, Novell, Gradient, Highland along with 15 others), but has not yet been implemented by OSF in the DME license services. OSF has not formally committed to delivering services compliant with LSAPI.

The PLS solution from Digital implements the LSAPI standard, and will be the first license technology to have this specification integrated into its base code. In addition, PLS will co-exist with the OSF DME license service. Therefore, customers can utilize both licensing technologies within the same computing environment. Completely integrated management of both technologies would have to occur over time starting with each license technology being managed independently. Common management API's have yet to be defined, but the goal is to set plans in place for this development within 12-18 months.

Toward that end, the PLS system utilizes the OSF DME RPC technology. In doing so, PLS complies with this key OSF technology and this can be carried over to multiple UNIX platforms (or close variants, like MS-RPC), starting with DEC OSF/1.

## Software Distribution

The OSF DME Software Distribution services provide base technology upon which vendors can deliver applications for customers that provide actual software distribution capabilities. The software distribution services from OSF are not tightly integrated, and as such, provide only a minimal basis for a complete solution in software distribution. When OSF released the DME Software Distribution services, Digital was well underway toward delivering a more complete set of services for Software Asset Management across a distributed, client/server, heterogeneous environment.

The current POLYCENTER Software Distribution product from Digital provides software distribution functionality for the OpenVMS and Ultrix environments. The product is being extended to include broader software distribution functionality. To cover the PC space (DOS, MAC, OS/2, NT), Digital is integrating POLYCENTER Software Distribution with Microsoft's Hermes product on NT and delivering this combined technology in the POLYCENTER AssetWORKS product family. Support for the DEC OSF/1 platform will also be provided as part of this extended capability.

POLYCENTER AssetWORKS controls software distribution from one consistent GUI across a number of heterogeneous clients. In addition, POLYCENTER AssetWORKS provides the capability of providing software inventory information and supports multiple network operating systems.

Digital will continue to support the OSF DME and develop methods of integrating AssetWORKS with the OSF DME Software Distribution services in order to deliver a comprehensive software asset management solution, which includes:

- Providing an integrated suite to address asset management needs
- · Partnering with leading vendors to provide complete solutions
- Incorporating and driving industry standards
- Broadening multi-vendor platform support

# 2. Network Management Option (NMO):

The OSF DME Network Management Option (NMO) is comprised primarily of the XMP API and a communication infrastructure based on the HP PostMaster technology. OSF has announced that Bull will be completing the Network Management Option (NMO) integration by adding both an event subsystem and integration between other subsystems. The delivery of the NMO is scheduled for late in calendar year 1994, fully three years from the original delivery dates envisioned by OSF. Digital supports the current efforts of OSF and Bull and will use this technology when it becomes widely available.

Digital's strategic management platform is now POLYCENTER Manager on NetView. Digital selected IBM's NetView/6000 product last year as its management platform because DME technology was delayed and customers required an NMO-based solution. By deploying POLYCENTER Manager on NetView (based on the same HP OpenView APIs as the NMO) Digital adopted technology compatible with the OSF DME NMO and re-affirmed our commitment to implement industry standards.

Digital was the pioneer in delivering the POLYCENTER Framework with its broad scope of management and its use of an object-oriented infrastructure. The OSF DME has validated the need for a management framework for the integration of system and network management applications. Digital's strategy includes migrating to DME compliance and delivering an integrated suite of network and system management applications utilizing DME components.

Now that IBM and Digital are collaborating to develop NetView-based products, customers can rely on the commitment of two leading network management vendors to evolve NetView toward the newest standards, including the DME, to compliment the current standards already supported.

# 3. Object Management Framework (OMF):

Digital believes that this is a critical area. The following is Digital's position on OMF:

- DME OSF (and NMO) integration effort has and will dramatically change much of the overlapping technologies submitted.
- Actual compliance to DME can occur only after OSF develops the DME compliance tests and final specifications sometime after December, 1994.
- Digital's commitment to DME continues as evidenced by providing the chair for the OSF DME compliance task force.
- Digital intends to be DME compliant, and will incorporate technology components from the DME as it becomes available and viable.
- OSF expects to release the DME NMO code in the late 1994/early 1995 for incorporation by member vendors in their own DME product offerings during 1995; no date has been supplied for release of the DME OMF.
- Actual DME-based end-user product offerings are expected to be available 12-18 months following the release of the DME Framework from OSF.
- The OSF DME OMF was the cornerstone of the DME, and it is now clear that OSF will not provide the OMF as conceived, if at all.

# 4. Managed Object Definitions:

The Managed Object Definition work is being driven by the OSF management SIG. Digital has supplied the Chair of the Management SIG (Brian Handspicker), the Vice Chair of the Managed Object WG and the Editor of the Managed Objects WG (Kathy Faust). The Managed Objects WG has three major sub-efforts:

- 1. Operating Systems Managed Objects (e.g. OSF/1)
- 2. Distributed Systems Managed Objects (e.g. DCE)
- 3. Management Systems Managed Objects (e.g. DME Distributed Services and Framework Services).

In addition, Digital has proposed the addition of a fourth effort focused on Hardware Managed Objects (courtesy of Chris deHek).

Digital has provided the bulk of the definitions for the operating system area (with excellent contributions from ICL) and all of the definitions proposed for the hardware area. Unfortunately, these are the only areas where the Man SIG has made any significant progress. HP and IBM have indicated their intention to work on definitions for contributions to the Man SIG, but apart from some initial work done by DEC, neither have made any recent contributions to the object definition effort. HP had responsibility for driving the management systems area, but no progress has been evident to date. At this point, the majority of the work pursued within the OSF Man SIG pertaining to Manage Objects has been done by Digital and ICL.

Digital is committed to continuing work in this area, however, the progress made to date (and the draft object definitions that exist) are not yet ready for standards review or release. The definitions that have been prepared for operating systems and hardware have not been widely reviewed within the OSF Man SIG, let alone within the industry as a whole. Until they have been properly reviewed by the appropriate standards bodies and OSF member companies, it would be premature for these definitions to form the basis of industry standards. Thus it is highly unlikely that implementations of these object definitions will be deployed in any near term industry products. Such implementations would be proprietary and non-interoperable, thus at odds with Digital's goals for open standards based computing. Investment by customers in such premature implementations would necessitate expensive upgrades and retraining once standards were available.

Digital still intends to implement the standard managed object definitions once they have been reviewed by the appropriate standards organizations and are available to the industry at large.

# 5. **OSF Motif 2.0:**

Digital plans to support Motif version 2.0 and X11R6 in a functional released of Digital's OSF/1 UNIX code named Platinum. Our goal is a first customer ship in the first quarter of calendar year 1995.

## 6. OSF DCE 1.1:

To date Digital has shipped DCE for DEC OSF/1 and DCE for OpenVMS VAX and AXP. by mid-year we will also be shipping DCE for Windows and Windows NT. In addition, DCE is a strategic component of our corporate strategies for transaction processing, object-oriented products, and Case tools. Our commitment is strong.

The current shipping Digital DCE products are based on the OSF DCE V1.03 code base. The OSF DCE V1.1 beta code is targeted by the OSF to be available in June. This release includes significant new features such as internationalization, support for other encryption algorithms, and performance improvements. Once the beta code is available, Digital will evaluate the engineering effort required and establish schedules for supporting this release.

Boeing Computer Services P.O. Box 24346, #MS 7A-49 Seattle, WA 98124-0346



February 16, 1994 G-4120-TWB-055

BOEING

Mr. Russell A. Gullotti President of the Americas Digital Equipment Corporation Digital Drive Merrimack, New Hampshire 03050-4303

#### Dear Russ:

The Boeing Company has taken a strong position on the delivery of open systems based-solutions for our future information systems, by incorporating in our UNIX application server architecture the requirement that our suppliers provide Distributed Computing Environment (DCE) and Distributed Management Environment (DME) based products. We have DCE installed in our Technology organization and are using it to demonstrate new client/server applications.

To operate information systems supporting thousands of users on-line, we need system management applications that span our heterogeneous computing environment from mainframes to desktop personal computers. The systems management applications must be based on open systems specifications and be widely available on multiple computing systems.

My staff has brought to my attention the activity that is taking place with a number of the Open Software Foundation sponsors, namely, Digital, HP and IBM. We are concerned that the OSF sponsors have not publicly announced they are licensing the DME 1.0 technology based on the DCE. We understand that you now believe your proprietary system management solutions, not based on DCE, will meet the needs of large end users. This would force us, and other major users, to become integrator of disparate system management products - precisely the position we wish to avoid through "open system" based products.

Page 2 Mr. Russell A. Gullotti G-4120-TWB-055

BOEING

As an early supporter and continuing participant in OSF, we want to state, as emphatically as possible, that The Boeing Company is committed to purchasing computer software products based on open systems specifications and standards. We view the role of OSF as the selector and integrator of technologies, developer of application environment specifications, and developer of validation test suites for heterogeneous computing environments. To meet our requirements for open systems software, we also expect OSF to submit its specifications and test suites to X/Open for specification formalization and vendor product "branding."

We are interested in knowing your company's plans for the inclusion of OSF technologies into your product lines. We would like to have details on Motif 2.0, DCE 1.1, DME 1.0 Distributed Services, DME Network Management Option (NMO), and DME Management Services Objects. We look forward to meeting with your staff and hearing your company's position no later than March 1, 1994. Please have your staff contact Dick Tennent on (206) 865-3613 to schedule a meeting.

Sincerely,

John D. Warner

Digital Equipment Corporation P.O. Box 92835 Bellevue, Washington 98009-2035 206.637.4000



# digital

February 16, 1994

Mr. Robert Palmer President, Chief Executive Officer Digital Equipment Corporation 146 Main Street Maynard, MA 10174

Subject: Your Participation - Boeing Executive Visit to Maynard

February 24, 1994 - 2:00 - 2:45 PM

Large Conference Room

Dear Bob:

On behalf of the Boeing Account Team, please accept our thanks and appreciation for arranging your busy schedule to spend some time with the Boeing Executives giving a "CEO Perspective."

Enclosed is our Boeing Corporate Visit Briefing Book and a copy of our Customer Visit Request Form to provide you with an overview of the Boeing Executives attending and our Visit Goals.

You may recall that you presented to some of these Executives in July, 1992. At that time, Boeing was delighted with your overview of Digital Manufacturing and Logistics and felt a tie to you since you went on to assume Digital's Presidency.

The overall theme of the visit is Digital's commitment to Open Systems and our Client/Server strengths and vision. Specifically, I'd like to ask them what Digital can do to grow our presence in the Boeing Account and capture a greater share of their IT budget. Over the many years of the Boeing/Digital relationship, Digital has consistently invested and provided extensive account support during both the prosperous and lean years. Now with our broad array of new products and services, our investment is attracting very senior, experienced Executives from the world business community and our customer oriented focus; we are more equipped than ever to significantly grow our presence and participation in the Boeing Company.

I will come over to your office a few minutes prior to your scheduled time to provide a pre-brief and answer any questions you may have.

Thank you again for finding time on your busy schedule to join us.

Sincerely,

J. Robert Tassone

Global Account Manager Boeing Account Team

cc: Russ Gullotti, President, Americas Area Boeing Executive Partner

JRT:kw

Digital Equipment Corporation PO Box 92855 Bellevue, Washington 98009-2035 206 637.4000

# orgetal

February 16, 1994

Mr. Robert Palmer President, Chief Executive Officer Digital Equipment Corporation 146 Main Street Maynard, MA 10174

Subject: Your Participation - Boeing Executive Visit to Maynard February 24, 1994 - 2:00 - 2:45 PN Large Conference Room

Dear Rob

On behalf of the Boeing Account Team, please accept our thanks and appreciation for arranging your busy scriedule to spend some time with the deeing Executives giving a "CEO Perspective."

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Thank you again for finding time on your busy schedule to join us.

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J. Hobert Tassone

Gland Account Manager Basely Account Team

Boeing Executive Partner

JRT:kw

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# digital

# DIGITAL EQUIPMENT CORPORATION

Russell A. Gullotti Vice President Merrimack, New Hampshire 03050-4303

January 24, 1992

Mr. Terry Millhouland
Director, Product & Process Definition
and Factory Systems
Boeing Computer Services
P.O. Box 24346 M/S 6H-JE
Seattle, WA 98124

Dear Terry:

Congratulations on what I understand was a very successful SMARTS Block Point II Release Implementation over the Christmas Holidays. From what Bob Tassone tells me, things are going well at the Auburn SMC and all SMARTS sub-systems are fully engaged and working.

I know all the hard work, energy and effort you and your team have put into SMARTS success and wanted to make sure that I sent a note congratulating you on this key milestone.

I look forward to offering my personal congratulations when you join us back here in March for the Corporate Visit you are sponsoring to Digital.

See you soon and best wishes for continued success in 1994.

Sincerely,

Russ Gullotti President Digital Americas Area

CC: Bob Tassone

# digital

# DIGITAL EQUIPMENT CORPORATION

Russell A. Gullotti Vice President Merrimack, New Hampshire 03050-4303

June 25, 1993

Mr. Stan Beckelman Vice President, Information Systems Boeing Computer Services P.O. Box 24346 MS: 7A-49 Seattle, WA 98124-0346

Dear Stan:

I came back to work this week with my "batteries fully charged" and enough stories about "the one that got away" to drive everyone crazy.

The time I spent with you and Jennifer et al, on the Daedalus was simply magnificent. The ship, the crew, the food, the weather, the fishing and, most certainly, the company made last weekend a most memorable experience for me.

I will miss working with the Art Hitsman/Stan Beckelman team as Art heads into his richly deserved retirement. However, I look forward to working with you and John Warner to continue the strengthening relationship between our two companies.

Once you are settled into your new house on the east coast, I will re-extend my invitation to you for a technology and service update as we discussed in your office and over the weekend on the Daedalus. Until then, of course, please feel free to call me with any questions or requests that you might have. I have already scheduled a call with Peter Dube to discuss RCAS with him.

Again, I thank you and Art and the Boeing Company for your hospitality aboard the Daedalus. Please say hello to Jennifer for me.

Sincerely,

Russ Gullotti Vice President, U.S. Area

# digital

# DIGITAL EQUIPMENT CORPORATION

Russell A. Gullotti Vice President Merrimack, New Hampshire 03050-4303

June 23, 1993

Mr. Jack McGuire Vice President of Computing Systems Boeing Defense & Space Group P.O. Box 3999 MS: 80-KC Seattle, Wa 98124-2499

Dear Jack:

I enjoyed seeing you at our lunch last week during my visit to Seattle and want to once again offer my best wishes on your upcoming retirement.

Over the years you have been a good friend and customer to Digital and have been a Boeing Executive that was always available to provide the advice and input we have needed to help us maintain a high level of customer satisfaction at the Boeing Company. As a result of your availability, advice, and fairness, you have been an important aspect of any success Digital has realized in the Boeing Company.

Please accept my thanks and appreciation for your interest in Digital over the years and hope that you enjoy a long and healthy retirement. I expect your golf handicap to drop significantly!!

Regards,

Russ

Russ Gullotti Vice President, U.S. Area

cc: Bob Tassone, Digital Peyton Smith, Digital

# DIGITAL EQUIPMENT CORPORATION

Russell A. Gullotti Vice President Merrimack, New Hampshire 03050-4303

June 23, 1993

Mr. Mike Quamme
Vice President of Computing Systems
Boeing Defense & Space Group
P.O. Box 3999 MS: 80-KC
Seattle, WA 98124-2499

Dear Mike:

I just wanted to send a note to tell you how much I enjoyed meeting with you at lunch with Jack McGuire last week.

As you know, the largest portion of Digital's installed base of equipment is in your organization. It goes without saying that it is very important to me that we continue to provide you with the level of service and support you have come to expect from Digital over the years.

During our lunch, we discussed the possibility of my hosting a D&SG Executive Technical visit to our Headquarters in Maynard, Mass once you are settled into your new position. I look forward to extending the invitation formally when you feel the time is appropriate.

Please accept my best wishes for success in your new assignment and I look forward to seeing you again in Seattle or at our Headquarters.

Sincerely,

Russ Gullotti

Vice President, U.S. Area

cc: Bob Tassone, Digital Peyton Smith, Digital

# DIGITAL EQUIPMENT CORPORATION

Russell A. Gullotti Vice President Merrimack, New Hampshire 03050-4303

June 23, 1993

Mr. Walt Braithwaite
Vice President, Information Systems & Architecture
Boeing Commercial Airplanes Group
P.O. Box 3707 MS:6H-JA
Seattle, WA 98124-2207

Dear Walt:

I enjoyed seeing you again last week and having the opportunity to personally congratulate you on your recent promotion.

Each time we meet, I gain greater insight into the problems that you and Boeing (and Digital!) are facing. Global competition, cost control, new product development, time to market, total quality management and much more.

I am convinced that Digital's continued investment in technology and skills can help you address some of the challenges you and the Boeing company face. In light of this, I look forward to your accepting my invitation for some future date to let me host you and members of your staff on an executive technical exchange at our Headquarters in Maynard, Mass.

Again, best wishes for continued success in your new assignment and feel free to call me if I can provide any assistance with your efforts. I look forward to our next visit.

Regards,

Russ

Russ Gullotti

Vice President, U.S. Area

cc: Bob Tassone Sam McCandlish

# DIGITAL EQUIPMENT CORPORATION

Russell A. Gullotti Vice President Merrimack, New Hampshire 03050-4303

June 23, 1993

Mr. John Warner Executive Vice President Boeing Computer Services P.O. Box 24346 MS: 7A-49 Seattle, WA 98124-0346

Dear John:

I enjoyed our time together last week during my trip to Seattle and wanted to again offer my best wishes for continued success in your new assignment.

As we discussed, once you are settled into your new position, I would like to re-extend my invitation to host you and your guests for an Executive visit to Digital. Such a meeting would afford us the opportunity to provide you with both a technical and strategic update on our Company as well as a forum for discussion on how we might work closer together in the future. We will, of course, be glad to work such a meeting around your desire to visit M.I.T. during the same visit to the Boston area.

By the way, I thoroughly enjoyed my time on the "Daedelus" and my introductory course in the art of Salmon fishing. I wish you could have joined us. Naturally, Art Hitsman caught the biggest fish!

I look forward to our next time together. In the interim, should any issue arise that I can help with, please feel free to call.

Sincerely,

Russ

Russ Gullotti Vice President, U.S. Area

cc: Bob Tassone

Douglas L. Frederick Director Materiel

**Boeing Computer Services** P.O. Box 24346, MS 7R-05 Seattle, WA 98124-0346

January 11, 1993 G-4100-DLF-002

Russ Gullotti
Vice President, U.S. Area
Digital Equipment Corporation
146 Main Street
Maynard, MA 01754-2571

Reference: Digital Pricing Program

Dear Mr. Gullotti

The purpose of this letter is to provide feedback on the Digital Pricing Program
(DPP) announced November 2, 1992. Boeing recognizes Digital's effort to establish "market" pricing and bring greater efficiency to the sale and acquisition of Digital products. These are commendable objectives which are aligned with of Digital products. These are commendable objectives which are aligned with activities in our company. Achieving these objectives will make each of us more competitive in our respective markets.

Regrettably, Digital's implementation of this program is disappointing to Boeing, specifically:

1) For your large accounts with substantial purchasing agreements, this program actually *increases* our net costs. For example: Part # VPA (old) DPP (new)

DEMFA-AA \$17,800 \$20,156 DSRVW-DA 3.159 3.295

While the list price may be viewed as a "dramatic 2) decrease" by Digital, it does not reflect pricing available for like products in the competitive marketplace.

It appears that Digital's "Business Partner Relationship" with its large customer accounts have little value in your new corporate marketing plans. Many of your strategic customers expressed deep reservations with this pricing practice when briefed this past year.

We believe our business relationship with Digital has value and thus we expect pricing which more closely reflects actual market prices. The DPP leaves intact a significant incentive for Boeing to explore alternative sources in order to fulfill its requirements.

Boeing requests the DPP be implemented within the DBA discount structure. This will continue to demonstrate the value you have for your largest customers. Our feedback regarding this program is a demonstration of commitment towards greater efficiency and effectiveness in our business processes. We look forward to working with Digital to resolve this issue.

Sincerely,

A. E. Hitsman cc:

> R. B. Palmer J. R.Tassone L.C. Fisher

BOEING



# digital

### DIGITAL EQUIPMENT CORPORATION

Russell A. Gullotti Vice President Merrimack, New Hampshire 03050-4303

March 16, 1993

Mr. Walter Brathwaite, Vice President Computing Boeing Commercial Airplane Group P.O. Box 3707 M/S 6HJA Seattle, Washington 98124

Dear Walt:

During my most recent Boeing update, Bob Tassone informed me of your promotion to Vice President, Computing for BCAG. Needless to say, I was absolutely delighted to hear about the announcement of your move to this important position.

I sincerely hope that you and I can continue our relationship as you undertake this important new assignment. I, for one, have sincerely enjoyed our many meetings and discussions over the past couple of years.

I have a Boeing visit scheduled in June and I hope that we can spend some time together when I can offer my congratulations to you personally.

Walt, please let me know if I can ever be of help to you in your new role. Boeing has made a wise choice in selecting you for this key role!

Sincerely,

Russ Gullotti

Vice President, U.S. Area

Just Hullatti

cc: Bob Tassone

# digital

# DIGITAL EQUIPMENT CORPORATION

Russell A. Gullotti Vice President Merrimack, New Hampshire 03050-4303

March 16, 1993

Mr. John Warner President, Boeing Computer Services P.O. Box 24346 M/S 7A-49 Seattle, Washington 98124

Dear John:

Please accept my sincere congratulations and my best wishes to you on your recent promotion to the Presidency of Boeing Computer Services. Clearly, this is an enormous and important assignment and, just as clearly, you are more than equal to the tasks that lie ahead of you.

John, I have enjoyed the several meetings that we've had over the past year or so and I look forward to more discussions about our mutual companies, our respective industries, and the rapid movement of technology. I plan to be visiting Boeing in June and hope to be able to see you then to offer my congratulations in person.

Please let me know if I can ever be of any help to you in your new assignment.

Best Wishes, Russ Yullatte

Russ Gullotti

Vice President, U.S. Area

cc: Bob Tassone

February 15, 1993

Douglas L. Frederick Director, Materiel Boeing Computer Services P.O.Box 24346, MS 7R-05 Seattle, WA 98124-0346

#### Dear Doug;

Thank you for your comments on our recent pricing and business practice changes. Since the introduction of these changes, we have received feedback from many of our customers. Our movement towards more competitive market pricing has been received positively. As you identified, there are instances with some of our larger customers where the price decreases did not fully offset the removal of standard discount. These cases were usually associated with older products which we were moving to end-of-life status.

We are continuing to review our pricing and we are making changes to get and stay more competitive with our pricing. I trust these changes will continue to reduce or eliminate any negative impact that may now exist.

While agreeing with the direction of these changes, some of our larger customers have expressed concern about Digital valuing their relationship, their volume of business, and the fact that this does not appear to be recognized explicitly in these new practices. Let me assure you that we very much value our relationship with Boeing and other large accounts. I believe we demonstrate our commitment to you in the level of sales and technical support and executive commitment we provide you in our efforts to be a best in class IT partner and in making Boeing successful. Discount is just one of the facets of our relationship and not often relevant as we have found that most of our business with larger accounts is done on terms outside of the DBA pricing due to the bidding process. With larger accounts, we expect this trend to continue as price becomes a more critical factor and you look to limit vendors and enter into defined supply contracts. In fact, I had an analysis done of a "basket of purchases | made by Boeing during the period of July through September of this year. Under our revised pricing practices Boeing would have saved over \$40K on purchases totaling without including your DBA discounts and competitive allowances.

I am very interested in further discussion about your concerns about adequately recognizing Boeing's value and to fully review the program and our reasoning with you. As a next step, I would be happy to have Frank Brown, Corporate Pricing Program Manager, review the program with you and discuss how you believe it should evolve.

Again, I appreciate your comments and look forward to your assistance in helping us amend the changes to better address your concerns.

Sincerely,

Russ Gullotti Vice President, US Area

CC: J.R. Tassone A.E. Hitsman F. Brown digital

# DIGITAL EQUIPMENT CORPORATION

Russell A. Gullotti Vice President Merrimack, New Hampshire 03050-4303

November 16, 1993

Mr. Mike Quamme
Vice President, Computing
The Boeing Defense & Space Group
P.O. Box 3999 MS:80 -KC
Seattle, Wa 98124-2499

Dear Mike:

I thoroughly enjoyed spending some quality time with you and your staff at the recent Boeing Executive Visit to our Marlboro offices.

Both Bob Tassone and I sincerely hope that our agenda gave you a better understanding of Digital's current product and services direction as well as a perspective on how we are performing as a company in our very competitive industry. By the way, we were extremely pleased with the interaction between the Digital presentors and each of the Boeing attendees.

Digital's success in Boeing began in the Defense and Space Group many years ago, and I hope that Digital's continued success throughout the Boeing Company will be enabled by our continued work with your organization. Digital wants to be a visible part of the success of the Defense and Space and of the Boeing Company.

It was a pleasure to see you again. I'll be giving you a call in the next few weeks to get your personal feedback on the time you spent with us. In the interim, if I can be of help, please feel free to call.

Sincerely,

Kinso Lull: tt.

Russ Gullotti

Vice President, U.S. Area

cc: Bob Tassone, Digital
 Peyton Smith, Digital
 Toby Arnold, Digital

### DIGITAL EQUIPMENT CORPORATION

Russell A. Gullotti Vice President Merrimack, New Hampshire 03050-4303

November 16, 1993

Mr. John Christensen Senior Manager Boeing Computer Services-Materiel P.O. Box 24346 MS: 7A-WA Seattle, WA 98124-0346

Dear John:

I enjoyed meeting you during the recent Boeing Defense and Space Group Executive Visit to our Marlboro, Massachusetts offices and wanted to send a brief note to thank you for your time and participation.

We hope our agenda allowed you a better understanding of Digital's current product and services directions. We were extremely pleased with the interaction between Digital's presentors and each of the Boeing attendees.

John, I know that you have a unique perspective of Digital from your area of responsibility in BCS Materiel. Therefore, I would appreciate any advice you can provide in helping Digital meet its goal of making Boeing one of our most satisfied customers. Please feel free to call me if there is anything I can do to ensure us meeting this important goal with Boeing.

Best wishes for continued success in your new position.

Sincerely,

\*\*Xuss Sullatti

Russ Gullotti

Vice President, U.S. Area

P.S. Good luck on the Boston Marathon this coming Spring. Just the thought of it enhausts me!

cc: Bob Tassone, Digital Peyton Smith, Digital Dick Near, Digital Digital Equipment Corporation P.O. Box 92835 Bellevue, Washington 98009-2035 206.637.4000



# digital

November 5, 1993

Mr. Mike Quamme
Vice President of Computing Systems
Boeing Defense and Space Group
P.O. Box 3999 MS: 80-KC
Seattle, WA 98124-2499

#### Dear Mike:

I just wanted to send you a personal note to more formally thank you for joining us at our facilities in Marlboro, Massachusetts last week for the Boeing Defense and Space Group Executive Visit.

I hope you felt, as we did, that the time was of value and well spent. I wanted to make sure that you and your Staff came away from the visit with a much clearer understanding of Digital's current products and services, our direction as a Corporation; and, most importantly, our commitment to ensure the highest levels of Customer Satisfaction to the Boeing Company.

My Team is working on a number of follow up activities and action items as a result of our time together. As things progress, I'll call Loree to arrange a time to update you on our activities at D&SG.

Thanks again for your participation and your endorsement of the visit with your organization. I hope you had a nice weekend with your son in Boston.

Sincerely,

J. Robert Tassone

Global Account Manager Boeing Account Team

cc: Russ Gullotti, Digital
Toby Arnold, Digital
Peyton Smith, Digital

Digital Equipment Corporation P.O. Box 92835 Bellevue, Washington 98009-2035 206.637.4000



# digital

November 5, 1993

Mr. John Christensen Senior Manager, BCS Materiel P.O. Box 24346 MS: 7A-WA Seattle, WA 98124-0346

#### Dear John:

I enjoyed our time together last week during Boeing Defense & Space Group's customer visit to Digital. I particularly enjoyed getting to know you better and understanding your views and perspectives about Digital and how we can work together with Boeing Computer Services to be successful.

While we covered a number of technical topics that may be outside of your current responsibilities, I hope the time served to give you an overview of how Digital works with D&SG.

Lastly, I know how busy you are and sincerely appreciate the time you took out of your busy schedule to spend with us. I know this visit will pay dividends and hope, like me, you found the time well spent.

I'll be calling you in a few weeks to set up a time to meet and get your perspective on the visit and other ideas on how Digital can better service BCS and the Boeing Company.

Regards,

J. Robert Tassone

Global Account Manager

Digital Equipment Corporation

cc: Russ Gullotti, Digital

John Warren Cael 11/16/93 O - gedeng set up for Jon / File VISIt. - Mare le Sine aguda mes your needs \_ D'((remen agenda presarally 2) - Catea on alpha.

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put Catea on alpha.

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#### INTEROFFICE MEMORANDUM

Date:

05-Nov-1993 04:16pm EST

From:

ROBERT TASSONE

ROBERT TASSONE

TASSONE.ROBERT AT AlRIPPLE at

Dept:

sales

Tel No:

206-637-4281

TO: russ gullotti @mko

Subject: Prepartion for 11/16 John Warner Call

Russ,

Attached is my original memo to you about my last meeting with John Warner on October 8th. Thanks for taking the time to talk with John on November 16th. Some items that I would weave into the conversation:

Corporate Visit in Early '94

\*I am really looking forward to hosting you and your BCS Executives on your visit to Digital in the January/February timeframe. Bob Tassone is working with Phil Lemoine on putting together a substantive agenda of pertinent topics for your final approval. (Note: Phil Lemoine is BCS's VP of Research & Technology - you met him on the last BCS visit)

Recent Quamme Visit

\*We hosted Mike Quamme and his people from the Defense and Space Group on a Visit back here a few weeks ago and it went very well. It was a technical update on a variety of topics and there was very high interest in our Open Client-Server Strategy, our extensive investments in UNIX, our various Frameworks technologies as well how how we are organized around Industries and Customer Business Units. You might want to give Mike a call for his perspective on the time spent with us and his suggestions of what you may want included in the agenda.

Changes/New things to share with Boeing

\*As you've probably are aware John, Digital has undergone some very unique and significant changes over the last year in the areas of organization, direction, strategies

as well as the introduction of new and innovative products and services that I personally want you and your people to understand and give us feedback on potential and value to Boeing.

## Your Help on Catia

\*Digital has been getting an alot of requests across many industries in our Customer base regarding the porting of CATIA to our new Alpha AXP Technology Platform. users of Digital's Alpha AXP products feel that there are several levels of magnitude of productivity improvement with equally significant cost reductions to be realized if we can get CATIA ported to Alpha. I'd like to ask your direction on Boeing's interests in CATIA running on other platforms and what you done in giving Dassualt your input. We understand that Dassault (with IBM's pressure) is doing a port of CATIA to HP UX. interesting, but somewhat baffling to us since HP UX is a proprietary operating system and eventually would require customers to do yet another conversion in the future to open systems or the next HP product in the announcement cycle. (Might mention Bud Enright's role and see if there is someone Bud could talk to at Boeing.) We have some very Senior people approaching Dassault and it would be of value if we knew Boeing's needs and wishes in this area.

#### RCAS

\*Bob Tassone and his RCAS Team conducted a PMR(Program Management Review) with Jimmie Smith in Reston this past Friday, November 12th. I have/haven't been updated, but had a recent update prior and understand things are going well and the Software (Secure GOSIP) has been stable for the last 10 months. There were a few Critical SPR's this past month, but I understand we resolved them in a matter of days. Once Stan Beckelman completes his move to Washington, I plan on visiting he and Jimmie during one of my trips there.

#### Close

I look forward to seeing you early next year. Schedules permitting during the visit, I'd like to personally introduce you to some new members of our Senior Leadership Team, (maybe Lucente/Brebach and reintroduce Palmer, if available) and personally take your through a current Digital update and overview.

Have a good holiday season and please call me if there is anything I can do on Boeing's behalf.

This should do it. Thanks, Russ.

#### INTEROFFICE MEMORANDUM

Date:

08-Oct-1993 06:46pm EST

From:

ROBERT TASSONE

TASSONE.ROBERT AT A1RIPPLE at

Dept:

sales

Tel No:

206-637-4281

TO: russ gullotti @mko

CC: Sam McCandlish @seo CC: Peyton Smith @seo CC: toby arnold @seo CC: mike boyle@seo

Subject: Boeing - John Warner Meeting

Russ,

I had a very good meeting with John Warner, President, Boeing Computer Services this afternoon. We covered a series of topics and John was very open, communicative and positive.

Some items of interest:

RCAS

John said that he conducted a full review recently, both internal Boeing and external Army customer. The good news per Warner is that Digital never came up as an issue and the few times it came up spontaneously, it was positive.

John gave me some items re RCAS to work with Stan Beckelman at our meeting next week.

Digital Organization

I took John through the Palmer organization, CBU/PBU structure and your role. This is an area that fascinates John and we had quite a lengthy discussion on the players, you, Lucent, Brebach, Palmer, etc. How we are organized around the customer, i.e., DMD CBU and U.S. Area coordination. John seemed intrigued and supportive of our direction around customer.

Interesting Note - I spent an hour with John. Warner told me that he just finished a brief meeting with some of "Digital's competitors" in here working together to try and sell Boeing their wares. John said that Scott

McNealy (President/Founder) of SUN was in to visit with some CRAY Executives to chat about how they are working together with an approach where SUN "front ends" CRAY. John said something amusing about everyone is partnering with everyone. Thought you might find this interesting.

#### CTG/John Donovan

Though John had John Donovan and CTG out to Boeing for a two day meeting last year, he is no longer a supporter of CTG. John brought Donovan out to crated awareness with "the mainframe bigots" that there are other platforms and to start to appreciate Distributed/Client-Server computing.

John said it went very well the first day, but on the second day, John Donovan put on a full court press to sell his tools (which Boeing feels are marginal to occasionally good but not leading edge or excellent) and CTG, to the point where John Warner received complaints from the attendees. John Warner was disappointed and felt that CTG took advantage of the situation. He thinks that Donovan does an outstanding job creating awareness and presenting, but his tools and methods are not "first rate." The net, no CTG potential at Boeing for the near term.

# Digital Corporate Visit

John and discussed an upcoming Corporate Visit and he got very enthused about coming to visit you and Digital in the first quarter, probably February. He said that he's looking forward to spending some time with you and getting an update for he and his Executives (direct reports) on Digital. John feels that the relationship with Digital is on very solid footing and he can combine a visit with Digital to stay an extra day for some MIT business. John assigned Phil Lemoine, VP, BCS Research and Technology to work with me to put the visit together.

#### Summary

Good meeting. A lot of information exchanged. John is feeling neutral to positive about Digital and our organization and direction.

#### Request

Russ, if you get a chance, you might give John a telephone call to do a "check in/ how's the new job, etc.," along with you looking forward to hosting a Boeing Corporate Visit early next year.

Hope things are going well. Thanks, and we'll see you at the end of the month with the Boeing Defense and Space Group visit.

Regards,

Tass