MEMORANDUM

TO:	Richard Fade
FROM:	Jeff Lum
DATE:	October 10, 1990
SUBJECT:	**Q1 Fiscal Year 1991 Review & Q2 1991 Plans - Lum Group**
CC:	J. Kempin, T. Hannum, M. Henderson-Rubio, G. Downing, J. Jenkins, N. Miller, Lum Team

The purpose of this memo is to review our performance in FYQ1 1990 and examine our focus for Q2 1991.

FYQ1 REVIEW

REVENUE

FYQ1 Actual	$9,085,218
FYQ1 Budget	$7,560,287
% of Budget	120%
FYQ4 Difference	-$542,179
YTD Difference	$1,524,931
YTD%Budget	120%

The group got off to a great start for the year in Q1 finishing 120% ahead of budget at $9.0M. The strongest performers were AST ($610K over) and Northgate ($670K over). Atari, DCA, and HP were the only accounts that fell below budget. Novell revenue of $170K got invoiced but will probably get credited later in the year.

DOS and Shell revenue accounted for 70% of total revenue; Windows (8%), and Mouse (5%). We ate up close to $1M in UPBs - mostly Compaq's and some NCR.

Fiscal Q4 processor growth was low (5.4%), but the solid accounts - AST, Compaq, and NCR were up considerably as a group. Wyse was down significantly from a year ago as their troubles continue

See attached spreadsheet and charts for more details and account breakdown.

NEW BUSINESS SIGNED

Account	Product(s)	Comments
Momenta	ROMDOS	$30 per system
Linotype	TrueImage	$250K source fee; $100K min commit
Hewlett Packard	ROMDOS	Embedded in network printer

PEOPLE

Karen Hurlbut went on maternity in July so we scrambled to unload Intel and three other accounts to other AMs and groups. **Peter Braman** is full time on Compaq as is **Jeff Daniels** on AST, Wyse and Northgate. **Teresa Chapman** has more than her hands full with NCR, and **Tom Henningsgard** seems to be stabilizing things a bit with Atari, Momenta, Novell and DCA. **Larry Edralin** has found out how challenging it is to manage HP solely on his own but is doing a fine job of it. **Nancy Ritzenthaler** is keeping more than busy with Tandon and the PDL business. **Ray Kanemori** joined the group in September and will focus on the Embedded Systems business. Since I will be moving on to Director of European OEM Sales, **Mark Chestnut** will replace me as Group Manager effective November 5th.

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FYQ1 IN REVIEW BY ACCOUNT

AST will be kicking off their Windows 3.0 marketing campaign in October as a result of Jeff's hearty promotion of the Windows Computing Theme. In addition to planned Windows 3.0 bundles with their Bravo line, they will also bundle with their Rampage memory boards for six months. Jeff also signed a Mouse license (AST will bundle with the Bravo's along with Windows.)

Atari finally agreed to look seriously at doing the Works port to the ST with a third party. We gave them source to the MAC Works code and they are evaluating now (they had some problems with the disk drive we sent them so it is taking longer than expected). ROMDOS and Works licenses for the Portfolio continue to drag on.

Compaq decided on Adobe as the safe approach to their PDL decision, but they also killed their low end printer which was the product the PBU was most concerned about. Compaq had a rough start with the MMW group, but Peter managed to smooth ruffled feathers to get them on track. After a disastrous start we ended up making a lot of progress towards a common RISC platform. Compaq has assured us that they will stay away from SPARC. Maritz has been assigned to drive Compaq's strategy in this area. Because of Compaq's delays

with their new laptop line, the Ballpoint promotion is still alive. Compaq is still interested in doing an exclusive bundling arrangement for 90 days. Peter has done a great job of penetrating this account since taking over full time in July and has gained a lot of confidence on the part of Compaq executives.

DCA began shipment of COM WS and COM Server. We should be realizing some solid revenue from that product next quarter.

Hewlett Packard's The first quarter results have been promising. Revenue from the last period was down slightly due to declining PC sales and MS-Net declines. This short fall will be made up in this next quarter through the ROM DOS deal with Corvallis and a packaged goods agreement with HP Scientific Instruments group. HP was here on numerous occasions to discuss network printing and color standardization, while visits were made to CND and PCG to meet and introduce Larry as their new account manager. Vancouver was visited, as well, to monitor the sleek engine printing capability and the introduction of TrueType as possible for their September release of Aristotle. Results from all of this is a re-alignment of the ELI network printer project to meet our development schedules, a

schedule to work with initially OS/2 and now Windows development on device independent color, redevelopment of the driver for Aristotle to include TrueType, and the signing of the LM/X 1.1 amendment by CND. **Highlighting the quarter was** the executive meeting between Gates/Hallman and HP's Chance/Platt/Frankenberg. This marked the first time we've had this level of management together visiting Microsoft. New Wave, NT OS/2 and LanMan dominated the discussions and several action items were recorded. HP expressed approval for our concepts of NT OS/2 and wanted to be kept informed of progress. Other important meetings took place with the Greeley Imaging group and the PCG DOS development and contracting group. We have determined that our plans for Fax protocols and HP Greeley's development plans coincide greatly and there is reason to continue cooperating on these developments. This work will be done with the Advanced Development Research team here in MS until it is assigned to one of the business units. PCG has a new General Manager - Jacques Clay, and he will operate the division from his location in France. We closed one piece of business with the Boise network printer group for a ROM DOS version that will be embedded into a network

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printer connect product that will allow up to two HP printers to be connected to a network anywhere on the line. These diverse meetings set the stage for several issues as they relate to networking, printing and PC products.

Momenta continues to try to leverage the Go factor to get special attention or financial benefit. They feel the technical consultation they can give us about our handwriting API for Windows and the user interface should be worth a discount on our Window-H pricing to them, but our Windows-H people don't agree. We will continue to convince them that they need to work with us independent of pricing/relationship.

NCR won the Bell Canada business. Great win for NCR and the MS product set! Unfortunately, NCR continues to balk at inconsistencies between MS and IBM pricing structures. There was also a lot of trouble-shooting with respect to Comm Bank's visit to MS and also Bell Canada sales activity. Opened discussions with NCR re: H/Windows on their new Notebook Handwriting PC. Chased down doc issues re: both OS/2 and Comm Server. Meetings with NCR's Cooperation group about their localization plans. The most key meeting was between Tom Mays, Sr. VP of NCR and Steveb on NT OS/2. NCR mentioned NT in its September 18 announce and we will explore what would be

required in shipping NT on NCR's Voyager product. In addition, we continued to work on workgroup pricing issues. NCR accepted our user-based pricing for LM and quasi UB pricing for Comm Server. Also, we worked to round out NCR's quasi user-based pricing by getting a special dispensation from Sybase. One of NCR's largest European customers, Fellesdata, was here for a day to hear about the MS systems strategy. In addition, there were two meetings to discuss H-Windows. In September, NCR announced their System 3000 seven levels of computing. NCR signed a per copy Win 3.0 agreement. Negotiations regarding NCR's development of ABIOS for OS/2 2.0 fell thru with the IBM/MS announcement. Mohan pushed again for discounted SE support for Bell Canada. Small issues continued to plague NCR's shipment of OS/2 and the Dayton Development Center will be disbanded and moved to several other locations.

Northgate wants to be the first direct mail order firm to sell SPARC workstations. All attempts to dissuade him to not pursue SPARC have been unsuccessful; Jeff organized Windows 3.0 sales training for Northgate's sales staff which went well. Northgate went public in August. They verbally committed to DOS 5.0 & Windows for two years and the mouse in one year in exchange for reducing their OS/2 minimum commitment. This new proposal will have

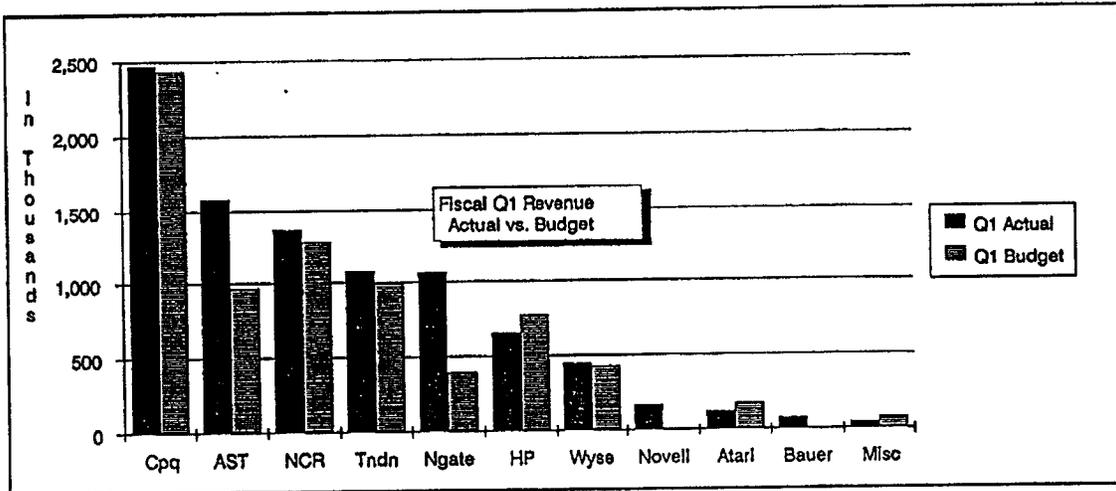larger total minimum commitment and clear up all unresolved license issues.

Novell Ball is in their lap to decide how they want to treat amounts paid to MS. Proposal by Murray to trade outstanding payments for interoperability work.

Tandon Nancy finalized and presented DOS 5.0 proposal. Also, she developed a system for tracking mouse orders and insured that both Tandon and Microsoft organizations understand the complete process. Nancy met with several Tandon folks to cover product updates, prospect for new business (Works) and build the account relationship

Wyse's Jeff has been actively positioning a new three year license, and they agreed to a new three year per processor arrangement. Wyse's Bill Seymour made a noticeable effort to work with Microsoft which was welcomed with relief by all. Wyse is considering pre-installing Windows 3.0 on their PCs shipped to Businessland's ComputerCraft.
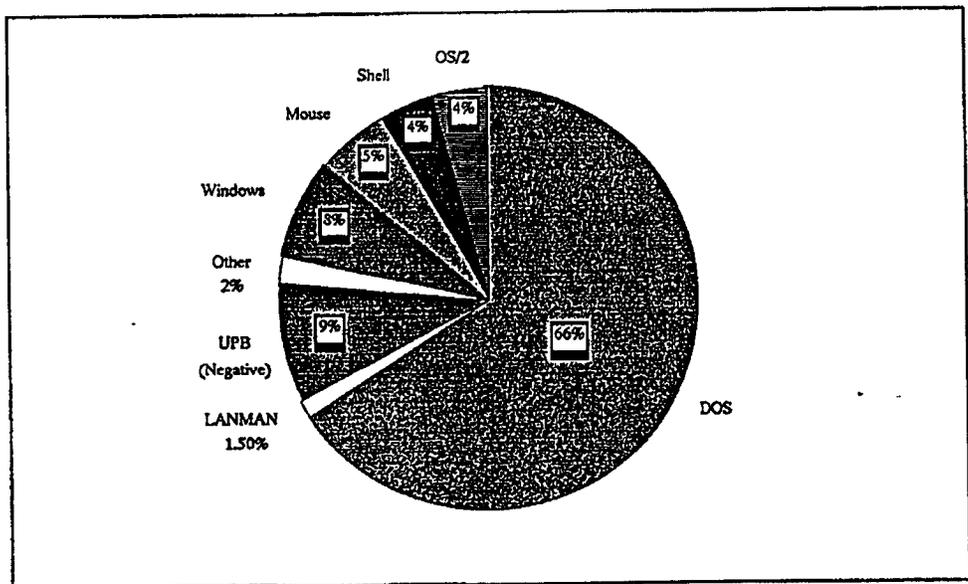
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FISCAL Q1 REVENUE - ACTUAL VS. BUDGET

Total *budget* for the quarter was $7.6M; total *actual* was $9.1M (120%) broken down as follows:

Fiscal Q1 Revenue Actual vs. Budget

(Chart: In Thousands, categories: Cpq, AST, NCR, Tndn, Ngate, HP, Wyse, Novell, Atari, Bauer, Misc; series: Q1 Actual, Q1 Budget)

Q1 REVENUE SUMMARY BY PRODUCT

The chart below depicts revenue for my group of accounts by significant product revenue area.
DOS, the always-dominant product, contributed 66% towards product revenue (70% if you include the Shell). UPB write-down accounted for 9% of revenue with Compaq leading the way with $1.3M of write off. NCR was the only other account to dip into prepaids, all others exceeded minimum commitment payments. **Windows and Mouse** sales were strong accounting for 13%. The "other" category includes minimal revenue from SQL, COM, PDL, languages, manuals, etc.


(Pie chart: DOS 66%, UPB (Negative) 9%, Other 2%, Windows 8%, Mouse 5%, Shell 4%, OS/2 4%, LANMAN 1.50%)

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PROCESSOR SHIPMENT REPORT FOR SHIPMENTS IN FISCAL Q4 1990 - ACTUAL VS. BUDGET

These shipments map directly to the revenue as reported earlier for FYQ1 '91. Overall, the group as a whole ended up **25%** over budget for the quarter. **AST and Tandon**, once again, lead the pack against budget at 177% and 151% respectively. Northgate finished way ahead of budget even though they had their first down quarter in 6 quarters. **Compaq** had their best quarter ever (3rd in a row) shipping over 215,000 units (123% of plan). **NCR**, sparked by a huge shipment of X86 based POS terminals, sprang back from their worst quarter of the year last quarter to finish 150% of plan. **HP** reports DOS copies only and was right on plan of 41K units. Wyse, and Atari, as usual, brought up the rear finishing well below budget.

Processors Shipped in FYQ490/Reported in FYQ191
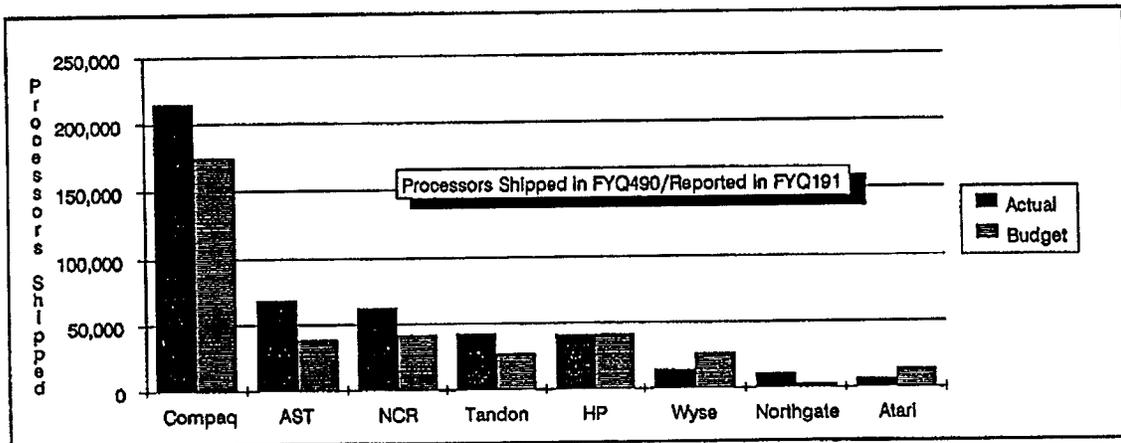
The growth from fiscal Q489 to Q490 was a meager 5.4%. *Gainers:* **Northgate up 46%, NCR up 26%, AST up 21%, and Compaq up 19%.** *Losers:* **Wyse down 57%, Atari down 37%, HP down 24% and Tandon down 5%.** The chart below details the growth from fiscal 1989 to fiscal 1990. As a group, the accounts finished **17% ahead of fiscal 1989.** *Gainers:* **Northgate (131%), AST (39%), Compaq (20%), NCR (18%), Tandon (14%), and Atari (13%).** *Losers:* **Wyse (-35%), and HP (-1%).**

Fiscal Year Comparison for CPU Shipment
Fiscal 1989 vs. Fiscal 1990
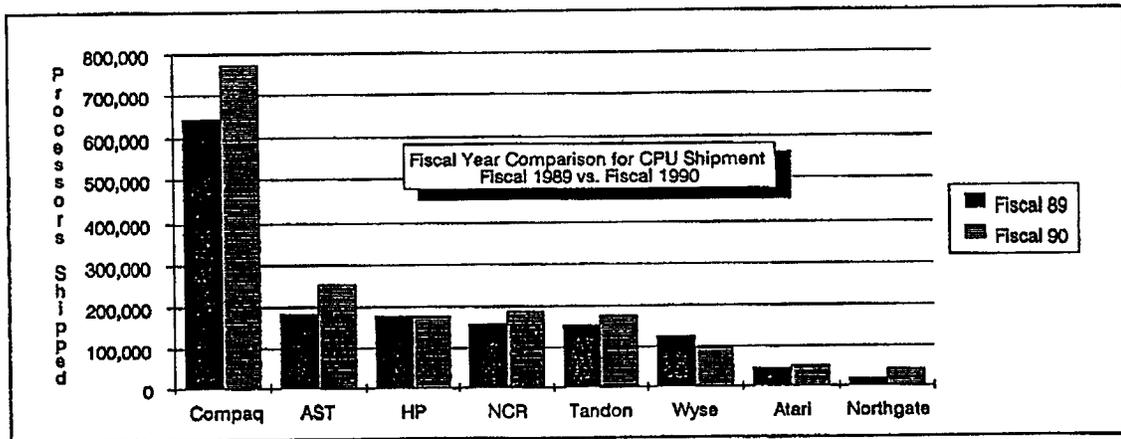
FYQ2 OBJECTIVES

REVENUE OUTLOOK

FYQ2 Forecast	$9,145,000
FYQ2 Budget	$8,599,789
% of FYQ2 Budget	106%
Difference	$545,211

Account	Forecast	Budget	Difference
AST	$1,300,000	$1,151,425	$148,575
Atari	203,000	203,000	0
Bauer	500,000	0	500,000
Compaq	3,000,000	3,400,000	-400,000
DCA	15,000	52,275	-37,275
HP	750,000	743,339	6,661
Misc	75,000	75,000	0
NCR	1,300,000	1,176,500	123,500
Northgate	500,000	396,250	103,750
Tandon	1,100,000	1,000,000	100,000
Wyse	402,000	402,000	0
Totals	$9,145,000	$8,599,789	$545,211

This is a reasonable preliminary estimate of expected Q2 revenue for the team. I expect **AST** and **NCR** to remain strong; **Northgate** should blow away their budget with their renewed interest in shipping Windows 3.0 and the MS Mouse. HP is a toss up based on how well we come out of the OS/2 minimum commitment negotiation. Several of Nancy's contracts pending will kick start some **Bauer** revenue in Q2. **Compaq** has a $3M cap in Q2 which may limit our upside considerably, but there is potential for Ballpoint or Mice business.

NEW BUSINESS OR LICENSES PENDING

Account	Product(s)	Comments	Expected Close Date
Atari	ROMDOS	$2/$3/$4 based on SRP	In negotiation; 10/30
Atari	Works 2.0	$2.50/$4.50/$6 based on SRP	In negotiation; 10/30
Wyse	Windows 3.0	Leverage OS/2 UPB	In negotiation; 10/30
AST	Mouse	$24	Final draft at customer; 10/15
Momenta	Windows-H	$unknown	11/30
Lasermaster	Trueimage	$45-$50/printer	10/30
Tandon	DOS 5.0	Proposal in to raise royalties $2-$4	12/30 - likely to be drawn out

Tom appears to be on the last leg of the Atari negotiations. Most of the language for the license has been worked out to mutual satisfaction. Jeff is working hard to finish the Wyse and AST licenses; and Nancy is trying close her first new business opportunities with Lasermaster and Tandon.

Also in heavy negotiations is Larry with HP's OS/2 minimum commitment issue. Following that he will face the bear by trying to raise HP's DOS royalty significantly (have to start high with them!). Teresa has been working hard to finalize approval for true user-based pricing with Sybase and NCR. Looking good here.

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GROUP OBJECTIVES

Exceed budget of $8.6M by 10%
Close all remaining DOS 5.0 licenses by 12/30
Review AM Skills Matrix by 10/15
Close one application or hardware promotion bundle by 12/30
Update all account plans by 12/30

OBJECTIVES BY ACCOUNT MANAGER AND BY ACCOUNT

Peter Braman

COMPAQ	BY
Reach agreement on joint RISC strategy	10/30
Sign strategic alliance letter of agreement	10/9
Sign Online support agreement	11/15
Resolve RUP concerns	10/30
Reach agreement on QBASIC translations	11/15
Sign Kanji DOS amendment	11/30
Sign MMV Windows agreement	12/90
Sign CDROM agreement	11/30
Sign 90-day promo for Ballpoint	11/30
Hold COMDEX exec review	11/15
Sign LANMAN training amendment	10/15
Sign CPA agreement for LANMAN sources	10/30
Reach agreement for Truetype support in Compaq PDL	12/31

Teresa Chapman

NCR Corporation	BY
Close LM Client software amendment	October 31
Finalize workgroup pricing amendment	October 31
Close Min Shell amendment	October 31
Qualify Multimedia Windows opportunity	October 31
Close DOS 5 amendment	November 30
Define NT OS/2 cooperation	November 30
Define Stylus Windows cooperation	November 30
Qualify PDL opportunity at Wichita	November 30
Draft amendment for MLP pricing concept	November 30
Qualify ROM DOS opportunities with NCR retail divisions	December 31
Develop OS/2 workgroup mailing list for NCR contacts	December 31
Define NCR's participation in ROE	December 31

Jeff Daniels

AST Research Northgate Wyse	BY
Position pricing on AST's new license	October 1.
Make sure the OEM Briefing has a long term impact on AST, Northgate & Wyse	October 7.

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Make sure AST's future notebook PC is Ballpoint ready	October 10.
Work with Brian Anderson to represent MS's Windows 3.0 well in AST's video	October 10.
Have AST ship OS/2 1.21	October 15.
Have Northgate ship OS/2 1.21	October 15.
Close Northgate on new MS-DOS 5.0 license	October 15.
Have Northgate recommit to Microsoft's Mouse with every 386sx, 386 & 486 PC	October 15.
Receive signed agreements to cancel Northgate's Windows/Mouse/keyboard license	October 15.
Close WYSE three year MS-DOS 5.0 per processor license	October 15.
Close or resolve S3's OS/2 MP Lan Manager license	October 31.
Have WYSE ship OS/2 1.21	October 31.
Find one new business opportunity	October 31.
Develop an OS/2 per copy sales plan for AST	November 1.
Reach agreement with AST to include Windows 3.0 on Premium 386SXs	November 1.
Have all AST's PC s listed on our DOS 5.0 & Windows 3.0 compatibility list	November 15.
Have all Northgate PCs listed on our DOS 5.0 & Windows 3.0 compatibility list	November 15.
Have all of WYSE PCs DOS 5.0 and Windows 3.0 on our compatibility list	November 15.
Work with AST's Melody Paterson to represent MS at AST's Comdex booth	November 15.
Make sure MS's products are visible at Northgate's booth if they don't show SPARC	November 15.
Make sure MS's products are visible at Wyse's Comdex booth	November 15.
Have AST ship MS's Working Models or Productivity Pack with their Bravo 386sx	November 15.
Have Northgate ship MS's Working Models or Productivity Pack with their PCs	November 15.
Have WYSE ship MS's Working Models or Productivity Pack with their PCs	November 30.
Have WYSE ship Businessland Windows 3.0 pre installed on their PCs	November 30.
Close AST's Windows 3.0 RAMPAGE board amendment	December 15.
Close AST's three year MS-DOS 5.0 license	December 31.
Have a strong, positive business rapport with AST, Northgate and WYSE	December 31.

Larry Edralin

Hewlett Packard	BY
Close ROM DOS deal	Oct 30.
Give a Works presentation	Nov 15.
Complete an umbrella royalty structure which includes Windows	Nov 15.
Give a sales training class to direct sales force in a region	Dec 31.
Introduce SQL Server to exec. mgt.	Nov. 30.
Introduce Comm Server to exec. mgt.	Oct 31.

Tom Henningsgard

Atari	BY
Get MS Entertainment Pack for Windows licensed	December 30
Qualify and license (if appropriate) OS/2 to Atari for the European market	November 30
Sign DOS 5.0 license	November 30
Sign Works and ROMDOS license	November 30

Novell	BY
Sign interoperability exchange agreement	November 30

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DCA	BY
Develop an action plan to assist DCA in the promotion of the Select Product line in three corporate accounts	November 15

MOMENTA	BY
Sign Stylus Windows agreement	November 30

Nancy Ritzenthaler

TANDON COMPUTER CORPORATION	BY
Hold executive briefing with MS and Tandon management	Dec 31
Qualify Works for laptop promotion/bundle	Oct 31
Reach verbal agreement on DOS 5.0 royalties	Oct 31
Conduct smooth account transition to new account manager	Nov 15

Printer Business	BY
1. Close forecasted license agreements	
- Linotype	Oct 31
- LaserMaster TrueImage	Oct 2
- Lanquest	Oct 15
- ECRM	Nov31
2. Prospect for business	
- GCC	Oct 31
- Qume	Nov 31
- Kodak	Nov 31
- Proactively approach 3 Bauer agreement customers to convert to TrueImage, using new pricing scheme.	Dec 31
3. Mount collection effort for forecasted accounts payable.	
- Bill Olivetti by:	Oct 31
- Bill BGL by:	Oct 15
- Mannesman Tally: Make sure performance issue meeting happens between MT and PBU, and bill	Oct 15
4. Attend advanced Excel class.	Dec 31
5. Attend OEM Systems Training class	Oct 22

Ray Kanemori

Embedded Systems	BY
Qualify Embedded DOS opportunities:	
from Embedded System Conference	October 31
from Scan90 Conference	October 31
from Chips & Technologies account visits	October 31
with NCR retail divisions	October 31
with Smith-Corona	October 31
with Mellard Technology	October 31
from European subsidiary visits	November 30
with Gemplus Card International	November 30

Ready System account visits — November 30
$495 ROM DOS BAK offer mailing to Embedded System Magazine list — December 31
Define additional Value-Added Distributor relationships:
    with Chips & Technologies — November 30
    with Ready System — December 31
    with electronic distributors in US and Europe — December 31
    with embedded tools suppliers such as Software & Systems, Data I/O, etc. — December 31
Define sales strategies:
    for domestic embedded DOS market — November 30
    for the embedded DOS market in each of major European subsidiaries — November 30
Complete Embedded DOS Business Plan — November 30
Develop standard contract for Embedded System deals — October 31
Sign letters of intent/NDAs and send out ROM-DOS BAK for evaluation to:
    Synerdyne — October 31
    Videojet — October 31
    Cook Manufacturing — October 31
    Mars Electronic — November 30
    Hughes — November 30
    Ampro — December 31
    Cumulus — December 31
Close the following business:
    Synerdyne contract — November 30
    Group Technology contract — November 30
    Cook Manufacturing contract — November 30
    Diversified Technology contract — November 30
    Videojet contract — December 31
    Norand contract — December 31
    Mars Electronic contract — December 31
    Hughes contract — December 31
Develop presentation for future account visits — October 31
Present embedded DOS 5.0 to Telxon and have them beta test it.. — December 31

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