Stanford Park Division \* Palo Alto, CA 94303-0889

From: John Minck Date: Nov. 25, 1987

To: Distribution Re: Marketing Communications

This is a brief review of some of the Marcom options we at SPD have for presenting our products to customers. A lot of this material is self-evident, but perhaps there will be some numbers you haven't seen before. Frankly, I have been delighted at the new interest in Marcom options shown by the various product team people, even to questions from finance people. Great!

My purpose is to list various Marcom options with some statistical information and some remarks that relate to the "bang for the buck" we think we get. And of course, I'll editorialize a bit to give you some of the "benefit" of my not-impartial observations.

Think of Marcom as a quiver of non-personal marketing arrows, directed at our customers. There's the usual limit on the number of arrows of each catagory you can use, due to resources. There is a large sales force doing the personal selling which is so important to high-priced HP. It is bigger and better than any competitor.

But the key decision making still involves us getting the marketing mix correct. Some of these Marcom arrows are beyond our control and influence. So it remains up to us in the division marketing to choose the mix, which may be different for each product line or project, depending on its position in its life cycle.

The following general narrative accompanies the tabular listing of the Marcom options:

## 1) Catalogs--Yearly SPD budget, \$108K

There is little question that the big HP General Catalog gives the biggest bang for the buck. It is the bible of the industry and almost every engineer has one behind them on the shelf. I don't know how many times I've been across the desk from a customer, discussing a new or old product, and the customer would reach back and look up a spec or whatever. We have worked hard to build that habit, and it works for us.

Statistics on the Catalog are mind boggling, about 10 traincar-loads of paper. There are only four printers in the country that can handle the job. One we commit a printing "window" in October, if we miss it, we lose maybe a month. Total budget runs over \$3 million with about 350,000 copies printed.

The upcoming complications are multiple translations. Japan has done their own for years for obvious reasons. Germany has their translation for 88 and it caused a LOT of division heartburn. In spite of that, top management is serious about French and Italian and maybe Spanish versions

for 89. At the minimum, this means higher per-page costs which gives us only one alternative--to cut our total number of pages. The other thing it means is to use fewer words, since French needs 25-30% more room to say the same thing.

The MTE Catalog is a sometimes event. The sometimes depends on budget. Lightning struck in Oct 86 and we published a new book for the first time in 4 to 5 years. It is also cheap presence because it is intended to stand alongside the big catalog on the same mentioned shelf. And when we do publish, it gets quite a lot of one-shot visibility. It pays off our one-stop-shopping argument. About 20-25% of the content and cost is shared by other MCG divisions.

My strategy of product appearance is as follows. Every product SPD makes should be "indexed" in the Big Catalog. Even if we can only list its frequency range and model number in a table on the product pages, it should be there and in the model number index in the front of the book. The reason is that customers look to that Catalog as our complete line. Some customers order directly from that Catalog.

The MTE Catalog should include as many specifications as possible. For sure, we want customers to be able to determine total performance from the listings. We are now struggling with content philosophy due to tight budgets from the other supporting divisions. We may drop all power-corded products from the MTE Catalog. I have a longer strategy memo if anyone is interested.

# 2) Customer Shows--Yearly budget. \$55,000 including HP Symposia reprints

This catagory includes both the trade or industry shows and the HP-only RF/Microwave Symposia. At least two advantages come from shows. They often bring manager-level customers out that our sales reps don't see regularly if at all. Secondly, we have factory people demonstrating equipment and making customer contact, normally left to the sales rep. Per-contact cost of a trade show is reasonable, even if you discount a lot of hamburgers walking through. The key is aggressive booth-standing and quick sorting-out of low interest people.

At the HP-sponsored RF/MW Symposia, we have key customers trapped for 7 or 8 hours listening to clearly-slanted measurement messages, and looking at modern demos with factory personnel. The sales reps attending get to talk with real factory R&D engineers, and the R&D folks get to talk directly with real-life high-powered customers. The RF/MW Symposium costs about \$150 per attendee on the average, and 5 divisions plus field share that cost.

#### 3) Newsletters--Yearly budget, zero dollars

This resource is a mixed blessing. Corporate produces these important Marcom vehicles but fairly strict limits are placed on space any division can command. Most if not all small stories fall on the cutting room floor. On the other hand, presence costs us virtually nothing, just my writing time, and a little apple-polishing with the corporate gnomes who do the managing editing.

T&M NEWS is the instrument part of MEASUREMENT/COMP NEWS which was broken up to yield a computer part called UPDATE. It is bi-monthly, and

has a broad T&M readership, with about 30& RF/MW interest.

The worst news was the 1986 demise of WAVELENGTH which hurts SPD because we lost a quarterly platform for all of our little "microwave knuckles" and the literature supporting them. The non-personal exposure of that highly-vertical microwave-only newsletter was hard to beat.

SPD is badly under-using the HP Journal platform. while they have a fairly high inbasket, and a long queue, material will get published and it reaches a wide audience and it costs us nothing but the writing time. It is important for us to keep cheerleading the lab to get articles written for the Journal.

### 4) Collateral--Yearly budget, \$300K

Comparatively, this item takes a big chunk out of our resources. It includes the regular product literature like data sheets and ordering guides. The freight costs alone are about \$75K per year. The category also includes the enormously popular wide range of application notes and product notes. If you think of SPD as not only inventing hardware instruments, but also inventing new measurements, you have the idea. And the ANs and PNs are the technical reports of that measurement "software". And it is one of the pre-eminent things we are known and respected for.

The beautiful part of having these technical notes is that the sales rep can use them to enhance HP's stature by passing them through, (after presumably learning the contents), or the notes can merely bypass the sales rep by distribution direct to customers.

Is this cost in the right proportion? I believe it is for the technical performance level of our products. Applications literature sells instruments because it points out how the customer can benefit technically from our superior but subtle new measuring techniques. And by bypassing the non-MW-peaked sales rep, we still get to more customers, without any attenuation of the technical message.

#### 5) Direct Mail--Yearly budget, zero for now.

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WAVELENGTH was a direct mail project. We bulk-shipped to 72 field coordinators worldwide, and they stuffed and mailed to 61,000 key microwave customers whose names were supplied from the local sales reps. Included in the package was a personalized letter on HP letterhead and one or more one-page color flyers and occasionally a short article reprint, along with the newsletter itself.

There is a new empire abuilding in Cupertino in a kingdom known as CIC, the Corporate Information Center, which will manage the Great-Computer-In-The-Sky which will hold all customer-profiled names and functional job data. Not only will it be the basis of Catalog, MCN, HP Journal, and other mailings, but it will allow specific focused mailings for any of a variety of product or application promotions by direct mail.

The downside is that the service may cost more than before. There is a large overhead structure being built to accommodate a system that ties in a personal HP Portable in the hands of each and every Sales Rep, who will dial up Big-Daddy every day to find out who to call on that day. And if you think all that will happen, perhaps I can sell you some gold stock.

#### 6) Technical PR--Yearly budget \$3K

Technical Press Relations is "free" to us and provided by Dick Harmon's group in Bldg 20. They now charge us nominal amounts for reproducing the 300 to 400 black/white photos sent to the world, and the printing of the press releases themselves.

We use this service for all it's worth, even writing short releases on simple application notes, in the hope they will land a little space in some magazine. Depending on the particular product or literature item, we mail releases to a different set of magazines, for example RF/Microwave design magazines versus "User" magazines like Defense Electronics or Telecommunications. We often go to "general purpose and circuit design" books too since they have some RF/Microwave readers. Typically, I mail to 50 magzines so that maybe 8 or 10 pick up the story and give us 3 column-inches of space for the announcement.

### 7) Technical Press--Yearly budget Tiny.

This area offers the best room for improvement since SPD (&HP) has been so lousy in the past. Our management, while preaching we are a market-oriented company, does not encourage writing or publishing. This must change, and some improvements are evident, for example the SPD matching honorarium program. So far we have matched 3 magazine payments.

One problem is that no-one is in charge. Writing the HP Journal benchmark article on a new product line like AWS is clearly a Lab responsibility. Writing product articles and applications briefs is a mixed responsibility. They cost little more than a bit of time lost from the project, and a little graphic expense. With our division inability to have any product advertising, it is one of the only games in town left for a division.

An intriguing fact is that there are too many publications on the market at the present time and they have lots of pages to fill. So if one magazine refuses an article because it is too HP-oriented, we can always get another to use it.

#### 8) Media Advertising--Yearly budget, SPD zero; MCG approx \$1,000K

It's no secret that some of us don't agree with the present MCG strategy for media advertising. Engineers and managers at our customers want to learn about product performance, both old and new. The lack of media presence of our older products contributes to their competitive weakness because not only are competitors advertising heavily, but the personal-selling side of HP customer contact doesn't focus on older products. Paid media is one of the only places where you have control of the message you want customers to read. If it flows through the Sales Rep, it gets filtered. And editors have no reason to write about old stuff.

I believe it is crucial for SPD to have product presence with paid media. Yet, under the present regime, it seems clear that product presence and hard-data ads are in eclipse. The MCG "image" campaign has little or no product performance data. I'm a good soldier, so I say that since someone else is in charge of media advertising, and they have for two

years rejected our SPD nominees, we should get on with the other arrows in the quiver that we can do some good with.

The MCG program has been mixed message so far with the "William Tell" insert, the "14 Get-well Cards for Your Signal Generator", etc. Lately, based on results from the SUMM study, a new image campaign was launched. One of the perceptions from the SUMM study was that HP is high priced, ergo the price ad. It seems to me that low prices at HP MCG are more like lightning strikes and that advertising directly into a different customer perception is against some basic ad principles.

One of our specific problems on present media is that the going-in price per ad is about \$50 to 75K. Since our entire SPD media budget for years was about \$125K and each product page campaign ran about \$20K, I'm not sure we can afford any division spending for products with those new rules. It's a reminder of the way Computer folks spend (and spill) money.

#### Summary

My basic feel is that we are deployed about right on the allocation of the present Marcom resources. On the other hand, I think the total SPD Marcom is woefully small, not just compared to the job to be done, but to some other HP divisions. I realize that MCG just inherently runs low on marketing ratios, out of antiquity, but with our broad exposure and number of diverse product lines, we are under-budgeted. Nothing new there.

The catalog vs. shows vs. collateral is close to traditional ratios. We definitely need to take better advantage of the free stuff like the HP Journal and MCN and trade magazines with technical articles.

Meantime, if any of you can exert any influence on the other spending resources, be my quest.

# A COMPARISON OF SPD MARCOM OPTIONS FOR CUSTOMER COMMUNICATIONS

OPTION	REACH	SPD COST	REMARKS				
Catalogs General	350,000 copies	\$2500/page \$108K total	The top results				
MTE Catalog	80,000 copies	\$1000/page	Excellent vertical impact				
Autotestcon AFCEA AOC Meas. Science NCSL	*8,000/8,000 5,000/3,000 3,000/1,000 25,000/3,000 10,000/2,000 e 650/500 500/500 total/SPD interest	\$4,000 \$4,000 \$3,000 \$3,000 \$5,000 \$1,000 \$1,000	Top MW designer show Good RF designer show Aerospace/Mil ATE show Top Milcomm/Tempest show Radar/EW folks All Metrology Metrology Managers				
HP RF/MW Sym	p 2,500/2,500 5 stops	\$30,000/yr	Key thought leaders in MW				
Newsletters T&M NEWS HP JOURNAL	220,000 200,000	0 0	New Product info, 6 editions How clever we are, long queue				
INST. NEWS WAVELENGTH	4,000 61,000	0 \$2,500/issue	HP sales reps/mgrs Key MW worldwide customers now demised				
COMPONENT NE		0	HP component sales reps				
COMPONENT UP ADVANCES		0	OEM Component customers US and foreign				
Collateral Application Product Note Prog. Notes	N. 15-25,000 s same 5,000	\$1 each same same	Technical sell same Pre-sale and post-sale				
Direct Mail Flyers	61,000	\$5,000	Used with WAVELENGTH (now demised)				
Technical PR HP PR releas	ses 50 magazines	\$1,000	Pickups in mags slowing				
Technical Pres Tech article Appl. briefs	es 10 magazines	0 0	Matching honorarium Magazines want these				
Media Advertis MCG group	sing 10 magazines	\$75,000/ "program"	No "product ads"				
Division?	10 magazines	Stodiam	Product ads?				

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# Ad-sales ratios by industry compiled

OAK BROOK, ILL.—Compiling data from more than 5,000 10-K reports filed by publicly held companies, Pansophic Systems has created its advertising-to-sales ratios report for about 250 industries.

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The table on this page is part of Pansophic's "1987 Ad\$ Forecasts," which includes ad-togross margin ratios and advertising growth rates by industry for 1986 and '87 and forecasts for 1988.

In addition, the study forecasts 1988 advertising investments for more than 4,000 individual companies, rates advertising effectiveness for the companies and their industries and measures ad spending stability.

In the advertising-to-sales ratio table shown here, the various industries are categorized by Standard Industrial Classification code numbers.

Figures show combined advertising expenditures reported for companies in the categories as a percent of total sales reported for the categories, and as a percent of gross margin (net sales minus cost of goods sold). It also shows the percent of ad expenditure growth for 1986 compared with 1985.

Pansophic notes that cautious interpretation is required because the data were compiled from financial statements rather than media auditing services.

What expenses are included under advertising expenditures filed in 10-K reports may vary from company to company. The reports ypically include both media expenditures and such related expenditures as costs of collateral literature and production. And in some categories, the figures include catalog advertising, point of purchase and direct mail.

Pansophic also notes that within many industry sectors, individual companies may spend significantly more or less than the average indicated.

Many large companies are in several fields, yet are listed in only their primary industry sector.

A related distortion also may result because a large subsidiary may not be included in the industry in which it competes.

Finally, a few large companies are privately held and their figures are not included.

The forecast portion of Pansophic's report predicts food companies will lead all industries in advertising expenditures in 1988 with \$8.6 billion. Retail department stores are expected to take second place with \$4.7 billion, followed by motor vehicles at \$4.5 billion.

Among the industries expected to show major percentage increases in advertising investments next year are ship and boat building, with a growth rate of 58.5%, and knitting mills with a smooth rate of 49.2%.

mills, with a growth rate of 49.2%.

Other high advertising growth industries predicted by the study include aircraft parts, up 31.7%; gold and silver ores, up 27.6%; dental equipment supplies, up 26.7%; radio, TV and music stores, up 24.3%; and real estate agents, up 22.4%.

Among individual companies, Pansophic forecasts combined worldwide expenditures for Unilever will top the list in 1988 with an advertising total of \$2.4 billion, ahead of Philip Morris Cos. at \$2 billion. Procter & Gamble Co.; Sears, Roebuck & Co.; General Motors Corp.; and Ford Motor Co. all are projected to top the \$1 billion mark in ad expenditures, with RJR Nabisco expected to ome in just below \$1 billion.

Among the top-spending Japanese companies, Honda is expected to spend \$796.9 million in advertising next year, followed by Matsushita Electric at \$584.4.

Matsushita Electric at \$584.4.
Pansophic, a leading packaged software company, acquired "Ad\$ Forecasts" from Schoenfeld & Associates in February 1986. A copy of the 184-page study is available for \$325 (\$300 prepaid) from the Pansophic Systems office at 1550 Northwest Highway, Park Ridge, Ill. 60068.#

# Advertising-to-sales ratios; 1986 (By industry)

Source Persecution Systems Inc., 1550 Northwest Highway, Park Ridge, B. (312) 390-7711. Legand SIC - Standard industrial dissellation. NEC - Not absorber classified. Ad dollars as per cert of sales - search/secret sales. Ad dollars as per cert of march - Ad appendix secret of cools said. Annual growth rate of scheduling.

bodustry	<b>8</b> C	Ad dedors on per cort of color	Ad define as per card of manyles	Arrival growth spin (%)	bulantry	SIC RA	Ad dollars on per cent of soles	Ad dollars de par certi el margin	Arrad grant sto (%
Alagains, automotis, tripo mitral	2000	1.5	44	99	Lumber & Oh Bidy Med-Res	5211	2.4	9.2	15.5
Advertising Agentosis Agels, Buttle Chemicalis	7311 2870	0.1 0.2	0.6 1.7	13.1 8.1	Lumber & Cores Med-Whei Mindrawy & Equipmer-Whei	9030 9080	1.0	4.8 77	120 1 <b>8.</b> 2
Agroubusi Prodin-Livertok Agroubusi Production-Crops	200 100	1.5	6.2 7.4	7/A	Med Circler Housess Med Generation	9961 2092	14.5 8.0	39.5 23.2	15.7
Air Therapartition, Coefficial	4611	2.2	14.5	10.2	Market Burrens Forms	2761	0.0	2.4	1.5
Arcret Atom & Signaling Products	3721 3006	02 2.4	12 83	(16.4) 12.8	Mass & Controling Day, NEC Massuring, Controling treat	3029 3020	1.0 2.0	21 48	4.7 8.5
Against & Other Printed Pds Apparel & Accessory Stores	2200 5800	23 24	4.6 6.1	5.5 13.6	Minist Producte Medical & Dorted Labo	2010	1.8 1.1	12.7 2.5	12.8 10.7
Apparel, Penal Cids, Natro-Whal	5130	23	9.0	4.1	Mindsorei Cherre, Botered Pde	2800	0.6	0.9	0.1
Auto Dealers, Gas Statons Auto Repair, Services, Garagus	9500 7500	32 27	11.7 4.1	1940 549	Metal Care. Shopping Contain Metal Doors, Frances, Most, Trim	3410 3442	6.3 1.8	53.7 6.2	15.6 5.8
Automatic Pergulating Controls Autom & Other Verlating-What	3822 5012	1.1 4.4	33 166	12.1 5.8	Maint Forging and Stampungs Mathematical Machinery & Eq.	3460	1.4 4.1	4.9 11.8	5.6 15.0
Balany Products	2080	2.1	43	8.0	Mgmt, Computing & PR Sucs	7392	12	49	(3.5)
Biological Products Stant Furnicus & Stant Wichia	2831 3310	· 24 21	48 142	18.3 14.7	Mireral Royally Trackes Mac Amusement & Rec Senton	6796 7980	9.7 48	1.3 14.1	(1 <b>8.0)</b> 14.9
Bolt N.E. Screw Floris, Wastes Booke Puby, Puby & Printry	3452 2731	1 <u>0</u>	42 72	5.6 8.5	Miss Charmoni Products Miss Furnium & Poliums	2200 2200	23 18	8.3 4.7	5.8 21.0
Script & Corned Soli Division Supress Credit Freibudore	\$285 8150	45 02	11.7	120	Mac Machinery, Ex Becircul Mac Menulacturing Industries	3690	12 52	17	13.8 7.9
BLUTTERS SERVICES, NEC	7300	3.0	ü	7.4	Misc Pleate Products	3079	1.5	4.4	14.2
Catho Television Operators Carr, Preserve Fruit, Vegetatris	200	1.6 6.1	2.4 16.6	16.7 8.2	Mac Patel Stores, MEC Mac Transportation Equip	3790	2.6 0.2	8.4 0.9	9.3 10.8
Cardy & Other Contactorary Catalog Showcoms	2085 8534	10.7 3.5	28.6 16.6	8.4 10.2	Missouliarusus Matel Work. Aktolis Horre Designs	3449 5270	0.9 1.3	1.8	(15.4) 34.9
Charmon & Alled Pos-Whit	\$161	20.6	32.3	12.6	Morgage Bartiers & Brotein	6160 7816	0.7	1.1 21.0	14.0 3.1
Chartosh & Affect Plods Ogundes	200 2111	21 72	5.9 14.9	9.0 12.6	Motion Polume Prodots, Servic Motion Polume Theaters	7830	9.5 3.5	16.6	1.2
Cigare Cimp Program & Solivana Svos	2121 7372	20 30	27 74	12.1	Motor Homes Motor Vehicle Part, Accessory	3716 3714	0.9 1.1	5.1 4.6	(0.5) (0.5)
Comm & Signaling devices, NEC Commercial Printing	3006 2750	12 14	27 30	10.8	Motor Verteins & Car Bodies Motorcycles, Boycles & Parts	9711 9730	1# 17	9.6 4.9	9.6 3.9
Commercial Testing Lates	7,987	1.6	4.0	5.9	Musical Instruments	3831	41	15.1	7.8
Communicatori Services, NEC Computer & Data Process Svice	4800 7370	31 0.6	11.0 1.4	(6.7) (13.0)	Navelpaper Pubp, Pubp & Persi Navelurable Goods-What NEC	271 1 5199	29 1.7	71 83	13.2
Computer Dark & Tape Deven Computer Equipment, NEC	3594 3680	1.6 2.2	53 49	16.9 17.7	Numery & Personal Car Fricti Office Automation Systems	8050 3657	1.7	5.4 3.3	€.7 7.6
Computer Grephics Systems	366	1.5	2.7	13.6	Office Furniture	2520	1.4	3.6	8.1
Computer Peoplemb Computer Related Svos, NEC	7379	25 1.4	7.0 2.1	8.1 (5.2)	Office Computing, Accing Metals CB & Gas Feld Expl Secs	3570 1382	1.2 1.1	20 34	9.0 11.2
Computer Stores Computer Terremate	5506 3883	29 21	120	21.1 9.4	CB Field Mechanity & Equip CB, Gass Field Services, NEC	9533 1380	0.5 1.1	1.5 3.6	(15.4) (27.6)
Computers-Marrisone	3662	1.3	21	15.1	Operative Builders	1531	1.7	10.6	13.2
Computers him & Micro Cores: Mirery, Med Hercle Eq	3650 3650	5.7 1.9	12.4 6.2	7.5 (1.6)	Operators-Norman Bidge Operators: Groods	6512 3861	26 28	75 53	9.5 19.2
Construction Mischenery & Eq. Construction-Not Biolic Constr	3531 1600	1.1 1.7	42 11.1	12.1 (7.4)	Option Character, Laser Scan Optical tradiuments & Lances	3665 3630	1.0	20 42	6.1 12.9
Construction-Special Trade	1700	1.0	3.5	10.5	Ordnerson & Acceptances	360	4.2	15.4 5.2	17.5 12.2
Convenience Stones Convrt Paper, Paperot Pol, NEC	5412 2649	04 21	1.7 4.5	14.2 7.1	Ortro, Prosth, Surg Appl. Supl. Outpatient Care Facilities	8081	21 18	17.3	24.2
Credit Reporting Agentoms Crudis Petroleum & Natural Gas	7321 1311	0.P 0.1	3.9 0.2	8.5 (14.5)	Part, Variation, Lacquists Paper & Allied Products	2500 2500	2.7 1.5	7.1 5.6	(2.8) 4.3
Dany Picclude	2020 7374	1.0	18.7 3.2	7.9	Potent Corners & Leasons Peurop & Pocetro Materials	8794 2950	1.0	6.8 2.6	72 151
Date Processing Services Dentel Equipment & Supplies	3943	2.7	5.0	26.7	Pers. Percis. Other Office Max	3960	5.3	11.5	9.0
Department Stores Datachie & Protechie Services	5311 7363	3.1 2.5	13.5 10.0	6.2 6.6	Perfume Cosmetic. Tales Prep Percelost Pubp. Pubp & Pret	2721	94 39	14.5 7.8	5.6 6.3
Chall, Flectly, Bland Liquer Ding & Propietry Stone	2086 5912	13.6	27.2 5.4	8.9 8.7	Personal Credit Institutores Personal Services	6140 7200	1.5	19.6	38 124
Chaps	200	9.3	13.6 4.6	44	Personal Supply Services Personal Supply Services Personal Supply Services	7360 5170	1.7 0.4	7.6 3.1	413 162
Dugs & Propinsy West Durate Goods-West NEC	5120 9000	0.7 5.3	20.5	24 84	Petroleum Reifreng	2911	6.5	0.9	5.6
Esting Paices Estuational Services	9812 (E20)	3.5 4.7	17.5	11.2 15.3	Pharmacoulcula Phono Recode, Magnetic Tape	3534	6.9 0.7	11.4	9.3 29.3
Enc Appendus & Equip-Whell But Mass & Test Industrials	5063 3825	0.6 1.5	27 33	153	Proteining Laboratores Proteining Egup & Supply	7365 3661	1.9	4.6 7.1	18
Elec Transmission & Datr Eq.	3810	10	2.9	11.3	Plant: Mat. Synthetic ream	2820	0.0	2.6	8.5
Elec. Electr Mech. Eq. Supply Electr Lighting, Wang Eq	3800	2.0 1.1	\$4 30	10.7 6.7	Polition Control Machinery Politics NEC	3250	1.2	4.2 6.1	16.1
Electric troustres Apper Electric Microy, Egup, MEC	3620 3699	21 4.8	149	60g	Profet Metal Bidgs & Comp Prep Feeds For Arenals, NEC	3440 2040	10	4.5 19.7	5.0 7.5
Bachic Comp. Accessories	3670	1.3	41	12.1	Printing, Publishing & Affect	2700	50 53	13.5	78.1 24.2
Backonic Componente, NEC Backonic Computing Equip	3679	12	7.0 2.6	8.0	Recing, to Track Operators Flacio & TV Broadcastrop	7948 4830	3.0	10.0	15.2
Sport: Parts & Eq-Wilel Engres & Tultimes	9085 3510	13 27	100	3.0 8.7	Pindo & TV Printerry Sins Parto, TV Correy So, Accessive	351	23 0.8	7.1 2.4	11.0
Engr. Achiect Suhey Sign Engr. Lab & research Eq	2011 2011	0.4 1.7	1.0	7.3 13.6	Plactic, TV & Music Stores Red Estate	5730 8500	49	15.1 8.1	24.3 6.7
Eq Partel & Leasing Suca	7394	35	0.2	10.5	Paul Estile Agerts & Mgari	(ES)1	3.6	11.7	22.4
Februard Matel Pds, NEC Februard Rubber Pds, NEC	3400 3000	1.0 1.3	25 29	1.8 8.7	Plant Estate Designs Plant Estate Investment Trust	6532 6798	0.9 1.5	23 41	13.7 5.8
Form & Garden Machinery & Eq. Finance Leasure	3820 6172	1.5 0.3	7.8 8.8	42	Party & Service Ind Machines Pleasanth & Development Labo	3880 7387	1.9 2.3	7.2 18.7	75 275
Phanca-Sanecae	6199	2.7	10.0	10.5	Robotos	3005	1.9	5.5	(4.5)
Poor Covering Miles Prour & Other Grein Mill Pole	2270 2041	<b>QB</b> 1.3	3.7 8.6	-	Rolling & Draw Horder Matel Pubbor & Misc Physics Prode	3000 3000	0.8 2.0	3.8 7.5	24.0 3.3
Food & Kindred Products Food Preparations, NEC	2000	34	21.9	9.0 11.7	Publics & Plantics Foreigner Severys & Louis Associations	3021 (1120	4.4 0.7	11.4 1.5	13.6
Focuser, Except Public	3140	42	10.2	(47)	Sweeth, Newcoste, Guide Swe, Eco	3864	1.6	6.3	3.6
Fright Foresting Fluid & to Dealer	4712 9000	68 51	120 3.6	38.1 (4.7)	Security & Commonly Broken Bernsonbustor, Related Design	8200 3674	9.6 1.5	6.5 3.6	9.3 (5.9)
Furnium Stone Gen Bidg Contractor-middle	8712 1520	5.0 2.4	12.0 E.7	143 274	Senery, Newtonick Stores Shael Mest Work	344	1.7 04	7.8 3.4	4.6 28.2
Gen Bids Contraction Nomine	1540	0.2	21 20	13	Step & Stone Birting & Palapair Strees Stones	\$730 \$861	Q# 1,8	L3 44	90.5
Coronal Industrial Match & Eq. Class Contamons	2021	1.5	5.5	44	Sherware, Flated Ware	3914	1.6	e e	<b>第7</b>
Cold & Sher Chies Creating Cord Publishing	1040 2771	21 4.4	120 7.7	27.6 8.8	Boup & Other Debugants Bolar Energy Edusp & Otmp	2541 3437	81 21	18.2 6.0	7 <i>7</i> (16.5)
Grounes & Related Pds-What Grouny Stones	5140 5411	0.7 1.5	4.7 6.2	1.7 7.4	Special Industry Machinery Sporting & Recognitin Code-Watel	3550 8040	13	3.6 21.7	15
Guerra Marine & Steern Well	3740 3450	61 11.0	0.5 21.4	84 87	Shuthed Clay Profuts Subded, Davidge, Er Consiliny	2250 6562	20 22	5.5 8.9	14.3
Hardway, NEC Hardwr, Plurib, Heal Eq-What	5070	5.9	41.6	10.4	Surgical, Mind Free, Apparellus	3941	2.5	4.8	10.8
Health & Alled Services, NEC Healthy Eq. Plumbing Police	9001 3430	1,4 2,4	4.5 6.7	122	Suce Allied with Exchanges Tale & Talegraph Apparatus	(6200) 30061	10.8 1.3	20.4 3.6	13.7
House, Ind Charles, Moranel Househile	2536	1.3 0.8	<u> </u>	11.0	Talagraph Comm (Mire. Pladio) Talagraph Comm (Mire. Pladio)	4621 4611	2.4 2.5	60 60	9.7 1.9
House, Monte, Tourist Courts	7011	3.5	12.0	40	Telephore Interconnect Sys	4892 2300	1.0	3.2	16.6
Household Appliance Stores Household Appliances	6722 3630	38 4.1	125 14.6	20.2 16.4	Tento Mil proteto Totalorg Plud Motore	3824	22 15	3.9	13.1
Housett Funkum Ind Progunic Chamballs	2510 2910	2.7 18.4	9.5 40.2	130	Toys, Amagment, Sporting Good Teatring Equip & Simulators	3940 3886	12.5 0.8	27.2 27	15.3 (4.3)
and Teache, Treatme, Tealme	257	6.9	53	6.3)	Tegraporation Sandoss	4700 3713	1.6	6.5	6.3
Installings Corrects Installings Management Instr.	342	1.6 1.7	4.5 3.0	۲E	Truck & Bus Bodies Trucking, Local, Long Distance	4210	23	9.5 12.5	Æ.4) 13.2
Industrial Organic Charmodia Ins Agunt, Broken & Service	2000 (400)	1.1 0.5	29 1.9	14.1 27.3	Veres, Pipe Ribriga, És Bress Veres Stores	3494 5331	10 23	618 218	12.8 10.1
Intercity, Purel Highwy Trans.	4131	43	73.5	123	Westes Code & Park	3970 4400	- <u>22</u>	7.7	(10.9)
Investors NEC James Stores	6790 9844	0.4 \$1	1.7 10.1	(100.0) 7.0	West Com Miling	2046	12	4.4	7.6
January, Procesus Mater Krating Mills	39711 2230	3.1 2.5	7.7 7.5	163 <b>49.</b> 2	Woman's Ready-to-Wear Stores Wood Buildings, Mobil Homes	9521 2450 3883	1.5 1.7	4.3 8.0	12.6 3.5
Laufer Goods, NEC	3199	5.2	123	12.0	X-Ray, Backgreedool Apparal	333	1.5	3.0	64