

MEMO ON PROPOSAL TO NSF FOR EPC

1 Our proposal to NSF for an Editorial Processing Center (EPC), SRI
 No. ISU-74261R, expired on March 15, but it is not dead yet. 1

2 As recently as May 12, all of us at SRI were in agreement that the
 proposal, as written, would not be in SRI's best interests and should
 be withdrawn. However, those of us in ISE thought we had better talk
 informally with our friends in NSF before taking any action. Doug
 Englebart called Dr. Harold Bamford of NSF's Office of Science
 Information Service on May 16. He learned that Bamford was relying
 heavily on the project proposed by SRI, and willing to be flexible to
 arrive at the definition of a project that would be advantageous to
 both NSF and SRI. After several telephone conversations, Bamford
 decided to put the \$150,000 of FY'75 money that he had intended for
 SRI into other NSF projects. These projects would normally have
 received the money in FY'76. This will have the effect of increasing
 Bamford's FY'76 funds by \$150,000. By doing that, and making use of
 \$145,000 budgeted for SRI in FY'76, he would have a total of \$295,000
 for the project in FY'76. He urged us to reconsider the level and
 form of cost sharing, but pointed out that some cost sharing would be
 necessary. He indicated that additional funds might be found by NSF,
 if necessary. See (GJOURNAL,3254,). 2

3 I talked with Chuck Hilly around May 23 and we agreed that SRI
 should take no formal action with respect to the proposal, but wait
 to hear from NSF. 3

4 Some of us met on June 6 to review the situation. We agreed that
 the proposed work is good work and that it fits well in our program
 for document development, production, and control. The major problem
 is in the cost sharing that we had proposed. We will review the
 proposal, reconsidering the staffing and other costs, with a view to
 reducing equipment costs. Following the review and a new estimate of
 the total cost, we should consider what cost sharing would be
 acceptable to SRI. 4

5 I discussed this matter with Stu Blake today and agreed that he
 would review our next revised proposal. 5

6 cc: DOCPLAN Distribution

B. Cox
 D. C. Englebart
 N. R. Nielsen
 D. H. VanNouduys
 T. L. Humphrey
 P. Whiting-O'Keefe
 W. S. Floyd
 C. F. Hilly
 S. P. Blake
 D. R. Scheuch 6

DRB 9-JUN-75 15:41 32714

MEMO ON PROPOSAL TO NSF FOR EPC

(J32714) 9-JUN-75 15:41;;; Title: Author(s): David R. Brown/DRB;
Distribution: /DOCPLAN([INFO-ONLY]); Sub-Collections: NIC DOCPLAN;
Clerk: KLM; Origin: < MABREY, EPC-PROPOSAL.NLS;3, >, 9-JUN-75
15:38 KLM ;;;;###;

1 32714 Distribution

1a Documentation Development Production and Control Community
Planning Group ,

Regarding RLL'S 25982 'Indicating a file is being modified'

1 DNLS users do not usually get notified when a file is modified by anyone when they load it because the message flashes by too fast. It would be valuable to me to see if I am currently modifying a file when I load it. It would also be valuable if I could see if some one else is modifying it.

1

KIRK 9-JUN-75 15:42 32715

Regarding RLL'S 25982 'Indicating a file is being modified'

(J32715) 9-JUN-75 15:42;;; Title: Author(s): KirK E. Kelley/KIRK;
Distribution: /SRI-ARC([INFO-ONLY]); Sub-Collections: SRI-ARC;
Clerk: KIRK;

1 32715 Distribution

1a Harvey G. Lehtman, James C. Norton, Jeffrey C. Peters, Dirk H. Van Nounuys, Kenneth E. (Ken) Victor, Richard W. Watson, Don I. Andrews, 1b Jan A. Cornish, Larry L. Garlick, Priscilla A. Wold, Pamela K. Allen, Delorse M. Brooks, Beverly Boli, Rita Hysmith, Log Augmentation, Joseph L. Ehardt, Raymond R. Panko, Susan Gail Roetter, Robert Louis Belleville, Rene C. Ochoa, Ann Weinberg, Joan Hamilton, Adrian C. McGinnis, Robert S. Rather, Karolyn J. Martin, David S. Maynard, Robert N. Lieberman, Sandy L. Johnson, James H. Bair, Jeanne M. Leavitt, Rodney A. Bondurant, Jeanne M. Beck, Marcia L. Keeney, Elizabeth K. Michael, Jonathan B. Postel, Elizabeth J. Feinler, Kirk E. Kelley, N. Dean Meyer, James E. (Jim) White, Douglas C. Engelbart, Martin E. Hardy, J. D. Hopper, Charles H. JFM ;Irby

Status of NALCCN

- 1 This message is to give you the current status of our procurement efforts and to let you know what is happening. 1
- 2 Our procurement of the PDP11s is still awaiting the DPA from GSA. The solicitation document is over at GSA awaiting approval also. The probability of getting a contract signed this FY is Less then or equal to 0. We are getting the funds extended for 60 days so that by end of July contract should be signed unles GSA does some really wierd thing to delay it. 2
- 3 There was funding left over so we decided to spend it on MODEMS. We would have to get modems as soon as the systems were delivered so we decided to get them this year since funds were available and there was nothing else to do with it. The following systems of modems were ordered for each installation (From VADIC) 3
- 3a 1- VA1616B Standalone 16 channel chassis 3a
- 3b 2-VA2010 Power supplies for redundancy 3b
- 3c 1-VA3405D Vadic 1200 Bps Full Duplex over voice grade dial up lines 3c
- 3d 6-Vadic 300 BPS modems with auto answer 3d
- 3e 1-VA801AD Pulse dialer 3e
- 3f 1-vadic 300 BPS modem with auto originate/answer. 3f
- 4 The total for the equipment was \$2912,00/site. 4
- 5 We have received a proposal from Roland Bryan of UCSB who proposes to do the following: 5
- 5a Maintain liaison with the NALCON sites to examine the installation sites, and have conferences with NALCON representatives. 5a
- 5b Design specification of HFP and implementation on the PDP11s 5b
- 5c Specification of I/O hardware for the host to PDP interface. 5c
- 5d Implement interace on the three Univac systems, including hardware. 5d
- 5e Do assessment Assessment of front end procesor use. 5e
- 6 The project to go from about July 1 to June 30 of1976. The total cost incllding hardware for 3 Unvvac sites is \$228,000 with the three

Status of NALCON

- sites instaled by 7 months after start of project (about February 1).
This will be an item for discussion at the forthcoming meeting. 6
- 7 All sites should consider their own in house capability and how
they want to approach the problem of development. In addition
locations should be determined for the installation of the systems. 7
- 8 The selection of the network coordinator is to be done soon. After
this selection, things should begin happening 8
- 9 At the next meeting everyone should come prepared to discuss their
commitment to NALCON for the coming year. 9
- 10 See you soon, hopefully 10
- 11 Larry 11

ILA 10-JUN-75 05:22 32716

Status of NALCCN

(J32716) 10-JUN-75 05:22;;; Title: Author(s): I. Larry Avrunin/ILA;
Distribution: /NAVIMP([ACTION]) EHC([INFO-ONLY]);
Sub-Collections: NIC NAVIMP; Clerk: ILA;

class

LN 10-JUN-75 06:34 32717

1 The training class for the VUCOM I starts at 9:00 a.m. not at 11:00 a.m. You are missing a good training, shame on you.

1

class

(J32717) 10-JUN-75 06:34;;; Title: Author(s): Lina Nardi/LN;
Distribution: /JHK2([ACTION]) GCE([ACTION]) MK6([ACTION])
IMM([INFO-ONLY]) ; Sub-Collections: NIC; Clerk: LN;

formatting your file

I Fred, I have not been able to duplicate the problem you explain except in one way, so I expect this is probably the problem. When you run the output processor, it starts at your current statement. If you start at statement 1, the output processor will catch all necessary directives and double space throughout. If on the other hand, you start at statement 2, where the actual text begins, the directives are not seen, thus not executed, and spacing is as currently set with your viewspecs, thus you will probably see single space within paragraphs, but double space between. To eliminate this problem, be sure you always JUMP to ADDRESS 1 (or 0) before you do an OUTPUT. If you do this and still have problems, I suspect the other possibility for trouble- bad phone lines or a slightly flakey terminal. Let me know if this doesn't fix the problem, and I'll come over and see what we can track down /Larry

1

LAC 10-JUN-75 07:42 32718

formatting your file

(J32718) 10-JUN-75 07:42;;; Title: Author(s): Lawrence A.
Crain/LAC; Distribution: /FPA([ACTION]); Sub-Collections: NIC;
Clerk: LAC;

Comments on RWW's Notes on Configuration of ISIC, 25974

1 The suggestions in this note seem very sensible, particularly the one that a group allocation scheme be kept in force until 1.33 has shown that it can really isolate users from one another. Since applications may be making some use of the BBN machine, we should probably ask for a group allocation scheme there as well. Hopefully, we can get beyond such "fixes", however, as soon as possible.

1

RA3Y 10-JUN-75 07:59 32719

Comments on RWW's Notes on Configuration of ISIC, 25974

(J32719) 10-JUN-75 07:59;;; Title: Author(s): Raymond R.
Panko/RA3Y; Distribution: /DCE([ACTION]) JCN([ACTION]) RWW([ACTION]) RLL([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk:
RA3Y;

Under what sign was Office-1 conceived? (Sandy's interest in astrology and other things amaterial has made its way into feedback.)

Rudy, she was lying low for awhile, but you've expectations have finally been confirmed.

Under what sign was Office-1 conceived ? (Sandy's interest in astrology and other things amaterial has made its way into feedback.)

1 (DAY) 7-JUN-75 0906-PDT 1.33 logout
 Distribution: NORTON, FEEDBACK, day, bedford, mattiuz
 Received at: 7-JUN-75 09:06:48-PDT

1

1a this is undoubtably the least important comment you will get on 1.33...one little change in it is the fact that jobs are now "KILLED" when we logout...this is computerese i know but maybe it reflects evolution in the wrong way...we should get augmentation systems away from that type of thing , they are designed for the non computer types and eventually these little things will become important...besides "KILLED" reminds me too much of some of our screw ups where files and activities do literal get wiped out! (ie our latest com game and weintraubs missing intra file)...don t expect any change here but just a little feedback in the philosophy department, where of course all this started many moons ago in doug's mind.

larry

1a

2

.....and Sandy's response...

3 (FEEDBACK(FEED)) 9-JUN-75 2007-PDT at OFFICE-1: *"KILLED"*
 Distribution: , DAY, MATTIUZ, BEDFORD, NORTON, FEED(FEEDBACK)
 Received at: 9-JUN-75 20:07:05

2

3

3a larry--have to tell you that i received your message regarding KILLED with applause! I sent a message to jim norton and the operator the day the new system came up explaining in four letter words how badly KILLED offends my innermost sensibilities. Semantically and karmically it is just not a very good idea to go around killing things, from my point of view. Ugh. The operator assured me that it would remain for the sake of conformity (!!!) with other systems (!!!)...well, I'm not through complaining either. Thanks for your comment. Sandy Johnson

3a

MIKE 10-JUN-75 08:13 32720

Under what sign was Office-1 conceived ? (Sandy's interest in astrology and other things amaterial has made its way into feedback.)

(J32720) 10-JUN-75 08:13;;; Title: Author(s): Michael T. Bedford/MIKE; Distribution: /RLR([INFO-ONLY]) IMM([INFO-ONLY]) LHD([INFO-ONLY]) ; Sub-Collections: NIC; Clerk: MIKE;

Comment on PKA's Trip Report 32689,

1 This is an excellent trip report, at least from my point of view as an interested outsider. One thing was especially nice. This was the inclusion of two mini case studies on user attitudes toward NLS. Pam's report indicates how valuable the training staff can be in closing our bootstrapping loop. The trainers, who probably have more day-to-day contact with Utility clients than anybody else are combinations of trainers, field representatives and technology transfer (in the broader sense) agents. By the way, although Pam's comments triggered this note, this is not the only excellent training report I have seen. But Pam's report concentrates on the flavor of what is happening Out There. This is very valuable to me and perhaps to others in arc-app.

1

RA3Y 10-JUN-75 08:13 32721

Comment on PKA's Trip Report 32689,

(J32721) 10-JUN-75 08:13;;; Title: Author(s): Raymond R.
Panko/RA3Y; Distribution: /ARC-APP([INFO-ONLY]); Sub-Collections:
SRI-ARC ARC-APP; Clerk: RA3Y;

MEMO REGARDING OUR PROPOSAL TO NSF FOR AN EPC

1 MEMO REGARDING OUR PROPOSAL TO NSF FOR AN EPC 1

2 To: Distribution 2

3 From: David R. Brown 3

4 Our proposal to NSF for an Editorial Processing Center (EPC), SRI
No. ISU-74261R, expired on March 15, but it is not dead yet. 4

5 As recently as May 12, all of us at SRI were in agreement that the
proposal, as written, would not be in SRI's best interests and should
be withdrawn. However, those of us in ISE thought we had better talk
informally with our friends in NSF before taking any action. Doug
Englebart called Dr. Harold Bamford of NSF's Office of Science
Information Service on May 16. He learned that Bamford was relying
heavily on the project proposed by SRI, and willing to be flexible to
arrive at the definition of a project that would be advantageous to
both NSF and SRI. After several telephone conversations, Bamford
decided to put the \$150,000 of FY'75 money that he had intended for
SRI into other NSF projects. These projects would normally have
received the money in FY'76. This will have the effect of increasing
Bamford's FY'76 funds by \$150,000. By doing that, and making use of
\$145,000 budgeted for SRI in FY'76, he would have a total of \$295,000
for the project in FY'76. He urged us to reconsider the level and
form of cost sharing, but pointed out that some cost sharing would be
necessary. He indicated that additional funds might be found by NSF,
if necessary. See (GJOURNAL,3254,). 5

6 I talked with Chuck Hilly around May 23 and we agreed that SRI
should take no formal action with respect to the proposal, but wait
to hear from NSF. 6

7 Some of us met on June 6 to review the situation. We agreed that
the proposed work is good work and that it fits well in our program
for document development, production, and control. The major problem
is in the cost sharing that we had proposed. We will review the
proposal, reconsidering the staffing and other costs, with a view to
reducing equipment costs. Following the review and a new estimate of
the total cost, we should consider what cost sharing would be
acceptable to SRI. 7

8 I discussed this matter with Stu Blake today and agreed that he
would review our next revised proposal. 8

9 Distribution:

DOCPLAN

B. Cox

D. C. Englebart

N. R. Nielsen

MEMO REGARDING OUR PROPOSAL TO NSF FOR AN EPC

D. H. VanNoubuys
T. L. Humphrey
P. Whiting-O'Keefe
W. S. Floyd
C. F. Hilly
S. P. Blake
D. R. Scheuch

9

MEMO REGARDING OUR PROPOSAL TO NSF FOR AN EPC

(J32722) 10-JUN-75 10:19;;; Title: Author(s): David R. Brown,
Kathy L. Mabrey/DRB KLM; Distribution: /KLM([INFO-ONLY]) ;
Sub-Collections: NIC; Clerk: KLM; Origin: < MABREY,
EPC-PROPOSAL,NLS;4, >, 10-JUN-75 08:39 KLM ;;;;####;

test message

1 Hi there

1

FGB 11-JUN-75 09:03 32728

test message

(J32728) 11-JUN-75 09:03;;; Title: Author(s): Frank G.
Brignoli/FGB; Distribution: /ILA([ACTION]) ; Sub-Collections: NIC;
Clerk: FGB;

1 32728 Distribution
la I. Larry Avrunin,

ack

i got your message re next meeting. i'll be there and i think dave
may be too. there doesnt seem to be a way for us to get to monterey
before 1400 unless we leave on sunday. presently anticipate arriving
sunday pm. is there a good place to stay? reagrds, paul

1

ack

(J32729) 11-JUN-75 15:19;;; Title: Author(s): Paul C. Bishop/PCB;
Distribution: /ILA([ACTION]) FGB([INFO-ONLY]) JDB2([INFO-ONLY
]) ; Sub-Collections: NIC; Clerk: PCB;

1 32729 Distribution

1a 1. Larry Avrunin, Frank G. Brignoli, J. David Brown,

Get-acquainted lunch for ARC and protocol-meeting guests

1 In the spirit of fostering mutual acquaintanceship between ARC staff and the 13 NSW contractors who are meeting here to discuss network protocol designs, we are holding a SPECIAL LUNCHEON PARTY for them and ARC staff, THURSDAY NOON, 12 Jun 75. We will hold it PICNIC STYLE IN THE ARC "COMMONS" (our console working space) at 1200; simple but FREE FARE will be served. Sorry to be late in planning and announcing this; and some apology for an in-doors picnic, which was decided upon for a combination of logistics and efficiency reasons. (I'm asking Jeanne Leavitt to organize things, with Joan Hamilton for backup.)

1

DCE 11-JUN-75 18:56 32731

Get-acquainted lunch for ARC and protocol-meeting guests

(J32731) 11-JUN-75 18:56;;; Title: Author(s): Douglas C.
Engelbart/DCE; Distribution: /SRI-ARC([ACTION]) ; Sub-Collections:
SRI-ARC; Clerk: DCE;

1 32731 Distribution

1a Harvey G. Lehtman, James C. Norton, Jeffrey C. Peters, Dirk H. Van
Nouhuys, Kenneth E. (Ken) Victor, Richard W. Watson, Don I. Andrews,
1b Jan A. Cornish, Larry L. Garlick, Priscilla A. Wold, Pamela K.
Allen, Delorse M. Brooks, Beverly Boli, Rita Hysmith, Log
Augmentation, Joseph L. Ehardt, Raymond R. Panko, Susan Gail Roetter,
Robert Louis Belleville, Rene C. Ochoa, Ann Weinberg, Joan Hamilton,
Adrian C. McGinnis, Robert S. Ratner, Karolyn J. Martin, David S.
Maynard, Robert N. Lieberman, Sandy L. Johnson, James H. Bair, Jeanne
M. Leavitt, Rodney A. Bondurant, Jeanne M. Beck, Marcia L. Keeney,
Elizabeth K. Michael, Jonathan B. Postel, Elizabeth J. Feinler, Kirk
E. Kelley, N. Dean Meyer, James E. (Jim) White, Douglas C. Engelbart,
Martin E. Hardy, J. D. Hopper, Charles H. JFM ;IRBY

To JML and JOAN re organizing thurs-noon picnic

1 Jeanne: Please take responsibility for organizing the luncheon announced in (32731,); Joan, please provide backup. 1

1a Text from announcement message of (32731,): "In the spirit of fostering mutual acquaintanceship between ARC staff and the 13 NSW contractors who are meeting here to discuss network protocol designs, we are holding a SPECIAL LUNCHEON PARTY for them and ARC staff, THURSDAY NOON, 12 Jun 75. We will hold it PICNIC STYLE IN THE ARC "COMMONS" (our console working space) at 1200; simple but FREE FARE will be served. Sorry to be late in planning and announcing this; and some apology for an in-doors picnic, which was decided upon for a combination of logistics and efficiency reasons. (I'm asking Jeanne Leavitt to organize things, with Joan Hamilton for backup.)" 1a

2 Keep it simple and low budget. (\$2 per head? \$2.50?? Perhaps best to make a plan and check with me re menu and cost possibilities.) Dick will o.k. NSW-project charge if that is allowable (like Jim Hillhouse can tell you), otherwise I'll o.k. overhead. Keep in mind that we really are in tight times; don't run out of staples, but on the other hand, avoid exotic stuff, don't buy beer or wine. 2

3 Please see that two stacks of sheets are available to all, one listing names and orgs of visitors, and one of ARC staff. 3

4 I think that it would be a good idea to make a personal survey of ARC staff to see that they get the word, and to get an attendance estimate. 4

5 Thanks in advance -- Doug 5

6 (P.S. Maybe check to see if (32731,) really did get out with the expected message, and Journal number??) 6

DCE 11-JUN-75 19:00 32732

To JML and JOAN re organizing thurs-noon picnic

(J32732) 11-JUN-75 19:00;;; Title: Author(s): Douglas C.
Engelbart/DCE; Distribution: /JML([ACTION]) JOAN([ACTION]);
Sub-Collections: SRI-ARC; Clerk: DCE;

text of DMA's thoughts from 4:00 am. to 7:30 am. this morning

don has asked us (mike k., max, anand, me) to prepare additonal info for the July 2 meeting with Thackery. By the end of next week he wants cash flows for audio conferencing, comp. conferencing, and VMS. He will use these to battle Thackery in terms he can understand. If he should happen to understand, I fear that he will want to have cash flows prepared in advance of any work that we plan to do in the future.

text of DMA's thoughts from 4:00 am. to 7:30 am. this morning

1 The long range planning function in any company is carried as a part of the administrative overhead. This is so because there is no direct contribution to the current year bottom line as a part of the operating results. 1

2 In a time of restriction in terms of expense it is inevitable that all overhead expenses will be examined with a critical eye. The question as to the value of the function cannot help but be raised by a cost conscious manager. 2

3 The question to be asked by the long range planner then is that of the value of the contribution to the firm in terms of the usual criteria which are used to evaluate financial factors. Generally these are in terms of operating ratios or contributions of revenue, or savings in operating capital or expense. 3

4 This appears to be difficult at first glance. An attempt to use this years planning effort will require projections as to contribution in years yet to arrive. In terms of the current year crisis this will offer no solution and will only appear as the overhead expense it really represents. 4

5 The most probable approach likely to lead to success is to go back in history and isolate the differences between the current year operating results from the basis of what they would have been in the absence of long range planning contribution in contrast with the long range planning contribution. 5

6 An attempt to do this will require the resolution of two further factors. The nature of the timing of the implementation, and the isolation of the revenue, capital, and expense streams involved with the introduction of the service item in question. 6

7 Matt Perzai had introduced the concept of the "Q" factor which was a programmed method of using operating ratios associated with introduction of capital and revenue streams. It would appear to me that this would offer some hope for a workable solution in view of prior attempts at cost separation. 7

8 An alternative approach would be to consider the reality of product evolution and the time frame in which it takes place. This can then be computed on the basis of % of revenues or investment to which some empirical judgement may be applied to identify how much it is reasonable to spend on this part of the corporate operation. 8

9 It must be presumed at the outset that there is some opinion and conviction that a long term planning function is desirable. Given that status it then becomes a matter of deciding how much, if any long term planning can be afforded. 9

text of DMA's thoughts from 4:00 am. to 7:30 am. this morning

10 Questions have been raised - whether rhetorical and reflective, or considered expressions of concern- as to the relity of long term planning effort toward the identification of new service portfolios if the capital cannot be obtained to pay for the necessary introduction.

10

11 This is a valid question but has to answered in the context of continued growth of an evolutionary service, orin the context of a service which displaces another market segment.

11

12 The earlier planning efforts to identify the segments likely to be displaced were contained in the study titled Telecommunications Convertible National Product. The attempts to identify the degree to which conversion had already happened were not successful. In the context of the new information related to the travel survey new results could probably be obtained.

12

13

13

MIKE 12-JUN-75 06:48 32736

text of DMA's thoughts from 4:00 am. to 7:30 am. this morning

(J32736) 12-JUN-75 06:48;;; Title: Author(s): Michael T.
Bedford/MIKE; Distribution: /LHD([ACTION]); Sub-Collections: NIC;
Clerk: MIKE;

implementation group meeting

i acknowledge receipt of your message and plan to attend first class.
fgb who is dls? -h on that must beduane stone. what i can't figure
out is who he sent the message to about the terminals iwanted othrqr
than my self. we can discuss the

1

RDA 12-JUN-75 13:20 32737

implementation group meeting

(J32737) 12-JUN-75 13:20;;; Title: Author(s): Robert D.
Archer/RDA; Distribution: /FGB([ACTION]) ILA([ACTION]) FGB([
INFO-ONLY]) ILA([INFO-ONLY]) ; Sub-Collections: NIC; Clerk: RDA;

archer7s messages

1 continuation of last message. we can discuss message from dls on
13 june 1975.

1

archer7s messages

RDA 12-JUN-75 13:26 32738

(J32738) 12-JUN-75 13:26;;; Title: Author(s): Robert D.
Archer/RDA; Distribution: /FGB([ACTION]) FGB([INFO-ONLY]) ;
Sub-Collections: NIC; Clerk: RDA;

rda messages

i frank i was only going to send one message, but i keep making mistakes. like hitting cr or ctrl and some other letter. i will try to get to other messages on friday. all for today.

1

RDA 12-JUN-75 13:30 32739

rda messages

(J32739) 12-JUN-75 13:30;;; Title: Author(s): Robert D.
Archer/RDA; Distribution: /FGB([ACTION]) FGB([INFO-ONLY]);
Sub-Collections: NIC; Clerk: RDA;

Public Service

1 I think it is a nice public service that every process commands
branch ends with the reminder "Control VD."

1

Public Service

(J32740) 12-JUN-75 14:38;;; Title: Author(s): Raymond R.
Panko/RA3Y; Distribution: /ARC-APP([INFO-ONLY]) ; Sub-Collections:
SRI-ARC ARC-APP; Clerk: RA3Y;

The cited item contains a commands branch that I have found useful in keeping track of my online files. Enjoy.

1 I often need to check the size of my files or note when I have last read a file (to see if it is in danger of getting archived). This requires that I use a series of options when showing my directory. To simplify life, I wrote a commands branch that you may find useful. Here it is. 1

2 The following group of statements consists of a process commands branch to show a user all of his or her active files, plus a branch for holding the file list. The commands under branch "active" copy the names of online files, together with the file size (in pages) and time of last reading, under the branch "Active Online Files." Most recently read files are listed first (your initials file is always listed first). 2

3 To use the commands branch, type (in Base): Process (commands at) Branch active <CA>. This will bring to your DNLS screen or set your current INLS marker to the first file citation. Only the file name will be shown. To see page size, set viewspec to "b" one more level. To see both page size and time of last read, set your viewspec to "br" or "w". 3

4 In DNLS, you can bug these file names in commands like "Load File" or "Delete File." I generally use this file list as "home base" in my initials file, from which I jump to other files as desired during a DNLS session. 4

5 (active) 5

5a Set Viewspec v 5a

5b Jump Address active .sxobbz 5b

5c Delete Flex active.sd 5c

5d Copy Directory active.sdTime Read N Size N Sort Reverse Read 5d

5e Set Viewspec u 5e

6 Active Online Files 6

6a < PANKO, RA3Y,NLS;10, > [Being Modified By PANKO (RA3Y)] 6a

6a1 Size in Pages: 16 [6]
Last Read: 12-JUN-75 16:24:03 [12-JUN-75 16:24:03] 6a1

6b < PANKO, MTC75,NLS;3, > 6b

6b1 Size in Pages: 12

Last Read: 12-JUN-75 16:18:12 6b1

6c < PANKO, SPLITSAVINGS.NLS;1, > [Being Modified By PANKO (RA3Y)] 6c

6c1 Size in Pages: 5 [4]
 Last Read: 12-JUN-75 16:17:39 [12-JUN-75 16:17:39] 6c1

6d < PANKO, GCS.NLS;2, > 6d

6d1 Size in Pages: 4
 Last Read: 12-JUN-75 16:16:06 6d1

6e < PANKO, RA3Y.NLS;9, > 6e

6e1 Size in Pages: 26
 Last Read: 12-JUN-75 15:45:03 6e1

6f < PANKO, MESSAGE.TXT;1, > 6f

6f1 Size in Pages: 8
 Last Read: 12-JUN-75 15:39:37 6f1

6g < PANKO, STONE.NLS;1, > [Being Modified By PANKO (RA3Y)] 6g

6g1 Size in Pages: 3 [31]
 Last Read: 12-JUN-75 14:45:18 [12-JUN-75 14:48:02] 6g1

6h < PANKO, R1.NLS;33, > 6h

6h1 Size in Pages: 52
 Last Read: 12-JUN-75 14:44:27 6h1

6i < PANKO, MASTER.NLS;20, > 6i

6i1 Size in Pages: 41
 Last Read: 12-JUN-75 14:22:34 6i1

6j < PANKO, FINALPHY.NLS;15, > 6j

6j1 Size in Pages: 13

Last Read: 12-JUN-75 14:16:03 6j1

6k < PANKO, OTP17.NLS;1, > 6k
 6k1 Size in Pages: 3
 Last Read: 12-JUN-75 07:55:44 6k1

6l < PANKO, OTP16.NLS;3, > 6l
 6l1 Size in Pages: 3
 Last Read: 12-JUN-75 07:54:38 6l1

6m < PANKO, OTP15.NLS;1, > [Being Modified By PANKO (RA3Y)] 6m
 6m1 Size in Pages: 3 [3]
 Last Read: 12-JUN-75 07:52:40 [12-JUN-75 07:52:59] 6m1

6n < PANKO, PHY.NLS;20, > 6n
 6n1 Size in Pages: 25
 Last Read: 11-JUN-75 20:11:51 6n1

6o < PANKO, IARCHIVE-DIRECTORY[,;1, > 6o
 6o1 Size in Pages: 1
 Last Read: 11-JUN-75 13:52:39 6o1

6p < PANKO, COMPCOM.NLS;5, > 6p
 6p1 Size in Pages: 17
 Last Read: 7-JUN-75 11:45:23 6p1

6q < PANKO, FACT-WEEK-ENDING-5/17/75.0-1;1, > 6q
 6q1 Size in Pages: 9
 Last Read: 6-JUN-75 16:16:17 6q1

6r < PANKO, TELECON.NLS;6, > 6r
 6r1 Size in Pages: 9

Last Read: 5-JUN-75 07:45:05

6r1

6s < PANKO, PERHOUR,NLS;2, >

6s

6s1 Size in Pages: 4

Last Read: 2-JUN-75 16:06:55

6s1

6t < PANKO, PRICING,NLS;2, >

6t

6t1 Size in Pages: 4

Last Read: 2-JUN-75 10:38:22

6t1

6u < PANKO, DIS,NLS;4, >

6u

6u1 Size in Pages: 14

Last Read: 2-JUN-75 10:37:48

6u1

(J32741) 12-JUN-75 16:59;;; Title: Author(s): Raymond R.
Panko/RA3Y; Distribution: /ARC-APP([INFO-ONLY]) GCE([INFO-ONLY])
KWAC([INFO-ONLY]) MIKE([INFO-ONLY]) SRI([INFO-ONLY]) ;
Sub-Collections: SRI-ARC ARC-APP KWAC; Clerk: RA3Y; Origin: <
PANKO, MAINTAIN.NLS;1, >, 12-JUN-75 16:31 RA3Y ;;;;####;

DCE 12-JUN-75 18:40 32742

Phone Log, 12 Jun 75: Al Dean of Logicon

Very promising development toward using NLS to interface to multiple data bases

Phone Log, 12 Jun 75: Al Dean of Logicon

1 Background: We have had previous contacts and discussions with Al, including his one-day visit to ARC last January (25019,).

1a Al Dean, Logicon, (714) 455-1330

1b Dean's name originally came up during a discussion when Steve Walker of ARPA and I were visiting with George Hickens of NSA last Fall. Dean had a contract from Hickens to make a comprehensive survey of all of the approaches that could feasibly be considered for handling the multiple-data-base access problems. Since one of the potentials we stress, for application of the "core workshop" that is NLS, is that it will make a very powerful workplace-frontend for data-base management systems, Hickens asked Dean to come and see us. That contact was quite stimulating for ARC, and also apparently for Dean, who seemed to find the "workplace-frontend" concept interesting and compatible with his own notions. Since then I have checked periodically with him as to the status of his plans and activities.

2 In today's call I learned that he (Logicon) had submitted a proposal under Craig Fields' Very Large Data Base (VLDB) Program, and that Dean has high hopes that it will be funded. A good bit of our subsequent discussion centered about the possibilities of that project being carried out in ARC's "next-year environment" (e.g. using CML, CLI, PCP, L10/11, and NLS).

3 He is just finishing the final report for Hicken's project, and will begin next week on a 10-day tour presenting his results. As soon thereafter as his confidence level for getting a contract from Fields gets suitably high, he'll schedule a visit to ARC to explore the detailed possibilities of doing his project in our environment.

4 The basic characteristics of his project are as follows:

4a It will test an approach they have conceived, using a "Uniform Data Language" to interface into the command languages for four, specified, "target" DBMSS. These are DBMSS that are of special interest to Hicken's community, and that are not likely to be found on the ARPANET.

4b Apparently it would be up to Dean to implement this experiment in any way that he deems best; however, his proposed costs were estimated by him on the basis of an approach with which he was familiar -- within a UNIX operating system on a PDP-11/45, using a "macro" language of Logicon's own development -- so alternative approaches would have to cost equal or less than that. He planned to have such an 11 installed at Logicon, tied to the ARPANET, to do his development work. Since the four specified target DBMSS aren't on the ARPANET, he is considering using some suitable

Phone Log, 12 Jun 75: Al Dean of Logicon

"fifth" DBMS, accessible on the ARPANET, for initial development purposes to check out their implementation. The later stages, with real instances of the target DBMSs, would take place in the ARPANET-copy environment being implemented at NSA.

4b

4c With regard to his "fifth" DBMS, for initial experimentation on the ARPANET, I mentioned the candidates that we have hopes for support to tie in to NLS. He knows their characteristics, and of the list immediately responded to the System 2000 as being an excellent candidate -- "very nice to go to." (This is the one that Stan Taylor and Ron Uhlig have both suggested, and the one that Ron has recently told me, over the phone, that he'd consider contributing like up to \$50K to tie in.)

4c

5 After refreshing his memory about the flexibility of our environment for implementing his experiment, I sketched out how, if he wished, he could use ELF instead of UNIX, and immediately have the CML/CLI, with PCP to NLS, and the power of DPS/PCP for communicating with his target DBMSs, plus the power already in NLS, plus Tree Meta for special translator construction, plus the L10/11 for a higher-level language with options to debug/run in either a TENEX or an 11. I pointed out that there will be a TENEX, dedicated to NLS application support, operating on the NSA Network, and that likely his stuff could smoothly move into that environment (providing NSA would buy the implementation of the DPS/PCP, TBH etc. approach -- other than which Dean will have trouble building a useful experimental system).

5

6 I think that it would be a real win all around for Al to do build his experimental system in our environment. It seems to me that he could do much more effective experimentation, quicker, easier, and cheaper. It would accelerate immensley the process of exploring the value of NLS as a workplace-frontend into even one DBMS, much less multiple DBMSs. It would also test out our tools for supporting the one-to-many translations from a common command language. AMC would benefit, even if they independently would pay to connect to System 2000; and if they did that, Dean/Logicon/VLDB would win by a shared-cost experimental setup. It would be a win for NSW to start providing powerful DBMS tools, whether or not accessed via an NLS workplace-frontend. It would also expose Fields' VLDB Program to the potential value of the NSW environment for their experimentation and ultimate applications.

6

7 His interest is high enough that he suggested spending as much as two days here, to pursue details in depth relative to this approach. I feel that it would be easily worthwhile for us to explore the issue with him in that much detail.

7

DCE 12-JUN-75 18:40 32742

Phone Log, 12 Jun 75: Al Dean of Logicon

(J32742) 12-JUN-75 18:40;;; Title: Author(s): Douglas C.
Engelbart/DCE; Distribution: /RL([ACTION]) SRI-ARC([INFO-ONLY])
; Sub-Collections: SRI-ARC; Clerk: DCE;

ti-terminals for NSRDC

1 I have not received a reply from your 22 May 1975 message to RDA and ???. Who else was the message sent ? Have you received a reply? Please send me a message indicating status of my request, Thank you.

1

RDA 13-JUN-75 07:56 32743

ti-terminals for NSRDC

(J32743) 13-JUN-75 07:56;;; Title: Author(s): Robert D.
Archer/RDA; Distribution: /DLS([ACTION]) ; Sub-Collections: NIC;
Clerk: RDA;

Setting Line Width

1 How do you set the display line width to 72? I'd really like to do this. At a more general level, should users be told about this capability, and is this setting procedure part of a whole new set of commands I've never heard about before?

1

Setting Line Width

(J32744) 13-JUN-75 08:11;;; Title: Author(s): Raymond R.
Panko/RA3Y; Distribution: /FEEDBACK([ACTION]) JAKE([ACTION])
JHB([ACTION]) ; Sub-Collections: SRI-ARC FEEDBACK; Clerk: RA3Y;

The Process bug

1 I've isolated the Process bug I described earlier. Please see me so that I can illustrate it. The problem has to do with nested Process commands (one Commands Structure calling another).

1

The Process bug

RA3Y 13-JUN-75 08:14 32745

(J32745) 13-JUN-75 08:14;;; Title: Author(s): Raymond R.
Panko/RA3Y; distribution: /FEEDBACK([ACTION]) ; Sub-collections:
SRI-ARC FEEDBACK; Clerk: RA3Y;

Process Commands in Office-1's new 133 exec

1 Unless you have sense switch 3 up, even on a Datamedia, Control VD does not cause a <CA> to be printed. This is a nasty little bug. If people learn about Process commands from documents (this is probably common), they would probably never think to put sense switch 3 up. We should fix this in hardware.

1

Process Commands in Office-1's new 133 exec

(J32746) 13-JUN-75 08:18;;; Title: Author(s): Raymond R.
Panko/RA3Y; Distribution: /FEEDBACK([ACTION]) US([INFO-ONLY])
JHB([INFO-ONLY]) ; Sub-Collections: SRI-ARC FEEDBACK US; Clerk:
RA3Y;

Secondary Distribution Copy from JHB

1 Is there some reason you sent me a secondary distribution copy of my memo to Dick Watson on ISIC? Or was this forwarded to all of ARC-APP?

1

RA3Y 13-JUN-75 08:21 32747

Secondary Distribution Copy from JHB

(J32747) 13-JUN-75 08:21;;; Title: Author(s): Raymond R.
Panko/RA3Y; Distribution: /JHB([ACTION]); Sub-Collections:
SFI-ARC; Clerk: RA3Y;

Vacations

1 Dirk, your vacation plans et al are not out of line with similar plans of my own. - I will be gone from June 23 through July 5th or so. That ought to be a pretty dead period anyway being around the fourth.

1

PWO 13-JUN-75 08:44 32748

vacations

(J32748) 13-JUN-75 08:44;;; Title: Author(s): Pat Whiting
O'Keefe/PWO; Distribution: /DVN([ACTION]) ; Sub-Collections: NIC;
Clerk: PWO;

ETS Use of Office-1: Why so high?

1 ETS has very recently jumped its connect time at Office-1 from about 20 hours per week to between 40 and 70. In your recent discussion of ETS you mentioned several activities, but upon light reading, I couldn't tell why use went up so suddenly. Can you tell me the cause, and is this use rate likely to continue in the future? Thanks, Herr Bair.

1

ETS Use of Office-1: Why so high?

(J32749) 13-JUN-75 13:48;;; Title: Author(s): Raymond R.
Panko/RA3Y; Distribution: /JHB([ACTION]) RLL([INFO-ONLY]) JCN([
INFO-ONLY]) SGR([INFO-ONLY]) ; Sub-Collections: SRI-ARC; Clerk:
RA3Y;

weekly report

- 1 USER SERVICES WEEKLY REPORT from JMB: on vacation 1
- 2 USER SERVICES WEEKLY REPORT from SGR: 2
- 2a MON Time: 6 hrs 3074 ==> at SRI-ARC
Time: 2 hrs 750D32 COY ==> at SRI-ARC 2a
- 2a1 Organized trip, edited third course, talked with PKA about how to teach the Basic Course in preparation for her teaching Jan Cornish (our latest programmer), met with JHB and BEV on future NSW documentation 2a1
- 2b TUES Time: 6 hrs 3074 ==> at SRI-ARC
Time: 2 hrs 750D32 COY ==> at SRI-ARC 2b
- 2b1 Proofed third course and sent it to be printed, created (Usreport,) (for better or for worse...), rewrote description of archive file in 1,33 for JHB to send around, answered questions about telnet, typescript files and process branches, discussed proposed changes to second course with JHB, began Jan C. on second course 2b1
- 2c WED Time: 6 hrs 3074 ==> at SRI-ARC
Time: 2 hrs 750D32 COY ==> at SRI-ARC 2c
- 2c1 Edited second course, finished second course with JAC3, made more travel arrangements, met with DVN, DMB, and JML on how to get the Final Report out, worked on viewgraph proposal, discussed link vs. addressing with reference to second course with JHB: discovered that .l looks only through the statement with the pointer for a link and stops, also that links are valid after any A: in a command that requires only one A: except for Jump to Address 2c1
- 2d THUR Time: 4 hrs 3074 ==> at SRI-ARC
Time: 4 hrs 750D32 COY ==> at SRI-ARC 2d
- 2d1 Sent message to KWAC about feedback stats, started 3rd course with JAC3, worked on description of directives to accompany page diagram, went to ARC-APP meeting 2d1
- 2e FRI Time: 6 hrs 3074 ==> at SRI-ARC
Time: 2 hrs 750p32 COY ==> at SRI-ARC 2e
- 2e1 Studied up on content analyzer, more of 3rdcourse for JAC3, journalized viewgraph proposal, finished directives description, tidied up loose ends in preparation for taking off for 2 weeks (sending messages, talking to people etc.) 2e1

weekly report

2f Note: After looking over this format I'm not sure how important the daily charges are. The only ones I need to know are from people dealing with clients and if I get copies of what you send to JOAN each week that should be fine. Anyone else interested in charges? Also, Rita gave a weekly description which I think is probably better than a blow by blow as above. Again what do you think?

2f

3 USER SERVICES WEEKLY REPORT from RH:

3

3a MON	Time: 5 hrs	charge 9259 ==> ARPA	3a
3b	Time: 3 hrs	charge 720D62 COY ==> SRI-WDC	3b
3c TUES	Time: 6 hrs	charge 9259 ==> ARPA	3c
3d	Time: 3 hrs	charge 720D62 COY ==> SRI-WDC	3d
3e WED	Time: 6 hrs	charge 9259 ==> ARPA	3e
3f	Time: 3 hrs	charge 720D62 COY ==> SRI-WDC	3f
3g THUR	Time: 5 hrs	charge 9259 ==> ARPA	3g
3h	Time: 3 hrs	charge 720D62 COY ==> SRI-WDC	3h
3i FRI	Time: 6 hrs	charge 9259 ==> ARPA	3i
3j	Time: 3 hrs	charge 720D62 COY ==> SRI-WDC	3j

3k Note: I have spent a great deal of time working for and on ARPA projects. Most of my time has been spent with the Program Management Division there, namely Ginny Gross and Bill Bangert. Ginny has been putting ARPA Orders on-line, printing them on letter head. In this capacity she has been getting additional NLS training. Bill Bangert has funding files on line and we have been experimenting with different ways of printing them using the XGP. As a matter of fact I have spent a great deal of my time experimenting with the XGP trying to get some set rules down for printing with it, besides what Jeanne's document of printing on the XGP does. Some people want just a piece of paper so they don't have to think and some want to know what does what to what. I have the forms for the ARPA Orders on-line and am in the process of writing instructions for them.

3k

4 USER SERVICES WEEKLY REPORT from PKA:

4

4a MON	Time: 8 hrs	charge 750D32 ==> at SRI-ARC	4a
--------	-------------	------------------------------	----

weekly report

4b Finally journalized the March feedback file as Dialogue. Talked about changes to my file on the statistics of the feedback file with SGR. Met with SGR to discuss how to teach the Basic Course to JAC3, the new programmer. Taught JAC3 the Basic Course. 4b

4c TUES Time: 8 hrs charge 750D32 ==> at SRI-ARC 4c

4d Finished all editing of the file of statistics on feedback (March), and journalized this. Sat in on SGR's second course session with JAC3. Met with SGR, Jake Feinler, and PAW to discuss work to be done for NIC this week. 4d

4e WED Time: 8 hrs charge 750D32 ==> at SRI-ARC 4e

4f Worked for the NIC all day. Made edits in files. 4f

4g THUR Time: 8 hrs charge 750D32 ==> at SRI-ARC 4g

4h Worked for the NIC all morning editing files. ARC-APP meeting during the afternoon. Then more NIC work. 4h

4i FRI Time: 8 hrs charge 750D32 ==> at SRI-ARC 4i

4j finished editing my trip report, and journalized to ARC-APP. Worked for NIC for about 6 hours completing everything given to me to date. Met with SGR and PAW to discuss work to be done during next 2 weeks while SGR is away. 4j

4k Note: 4k

5 USER SERVICES WEEKLY REPORT from PAW2: 5

5a MON Time: 8 hrs charge 750D32 COY ==> at SRI-ARC 5a

5b TUES Time: 8 hrs charge 750D32 COY ==> at SRI-ARC 5b

5c WED Time: 8 hrs charge 750D32 COY ==> at SRI-ARC 5c

5d THUR Time: 8 hrs charge 750D32 COY ==> at SRI-ARC 5d

5e FRI Time: 8 hrs charge 750D32 COY ==> at SRI-ARC 5e

5f Note: This past week has been reasonably productive. I concluded the editions on the most recent print-out of the glossary...but from past experience I know better than to believe I have put the finishing touches on the final edition! Am now working on editing a rough draft of ARC's final report to be sent to the people at ARPA, again using pretty basic editing commands. Am reading over Dean Meyer's report, an NLS promotional paper

weekly report

geared toward potential exec.-type users. He had thought by having me read it, someone relatively new to the NLS system, I might be able to determine clearness, understandability, etc., of the report.

5f

6 BLANK FORM

6

6a USER SERVICES WEEKLY REPORT from ID:

6a

6a1 MON Time: H hrs charge ==> at place

6a1

6a2 TUES Time: H hrs charge ==> at place

6a2

6a3 WED Time: H hrs charge ==> at place

6a3

6a4 THUR Time: H hrs charge ==> at place

6a4

6a5 FRI Time: H hrs charge ==> at place

6a5

6a6 Note:

6a6

weekly report

(J32750) 13-JUN-75 14:10;;; Title: Author(s): Priscilla A. Wold,
Susan Gail Roetter, Rita Hysmith, Pamela K. Allen/PAW2 SGR RH PKA;
Distribution: /US([INFO-ONLY]) ; Sub-Collections: SRI-ARC US;
Clerk: PKA; Origin: < ROETTER, USREPORT.NLS;6, >, 6-JUN-75 17:33
PKA ;;;####;

New NSRDC Idents

1 Sandy/Feed,	1
1a Please make the following idents valid under the NAVMINI directory:	1a
1a1 RDA Robert D Archer	1a1
1a2 CMC C. Michael Chernick	1a2
1a3 JPS James Peterson Shores	1a3
1b Please make the following idents valid for the NAVMINI directory and set their on-line delivery to NAVMINI.	1b
1b1 LMR Lou M. Robertson	1b1
1b2 MWT Manley W. Turner	1b2
1b3 RRW Richard R. Wolff	1b3
1c Finally, please generate idents for the following individuals and make them valid under the NAVMINI directory.	1c
1c1 Honey Sue Elovitz	1c1
1c1a Naval Research Laboratory	1c1a
1c1b Code 5403D	1c1b
1c1c Washington, D.C. 20375	1c1c
1c1d Tel: 202 767-2953 or Autovon 297-2953	1c1d
1c2 Gilbert B. Myers	1c2
1c2a Naval Electronics Laboratory Center	1c2a
1c2b 217 Catalina Blvd. Code 5500	1c2b
1c2c San Diego, Ca. 92152	1c2c
1c2d Tel: 714 225-7044 or Autovon 933-7044	1c2d
1c3 Henry G. Stuebing	1c3
1c3a Naval Air Development Center	1c3a
1c3b Code 552	1c3b

New NSRDC Idents

1c3c Warminster, Pa, 18974	1c3c
1c3d Tel: 215 672-9000	1c3d
1c4 Jack M. Zyphur	1c4
1c4a Naval Undersea Center	1c4a
1c4b Code 4531	1c4b
1c4c San Diego, Ca, 92132	1c4c
1c4d Tel: 714 225-2721 or Autovon 933-2721	1c4d
2 Regards,	2
3 Frank	3

FGB 13-JUN-75 14:34 32751

New NSRDC Idents

(J32751) 13-JUN-75 14:34;;; Title: Author(s): Frank G.
Brignoli/FGB; Distribution: /FEED([ACTION]); Sub-Collections: NIC;
Clerk: FGB;

Check Ident Information

Greg,
Please show this to Gil Meyers & check for accuracy. In particular,
what is Henry G. Steubings actual tel. number. Thanks.

Check Ident Information

1 Sandy/Feed,	1
1a Please make the following idents valid under the NAVMINI directory:	1a
1a1 RDA Robert D Archer	1a1
1a2 CMC C. Michael Chernick	1a2
1a3 JPS James Peterson Shores	1a3
1b Please make the following idents valid for the NAVMINI directory and set their on-line delivery to NAVMINI.	1b
1b1 LMR Lou M. Robertson	1b1
1b2 MWT Manley W. Turner	1b2
1b3 RRW Richard R. Wolff	1b3
1c Finally, please generate idents for the following individuals and make them valid under the NAVMINI directory.	1c
1c1 Honey Sue Elovitz	1c1
1c1a Naval Research Laboratory	1c1a
1c1b Code 5403D	1c1b
1c1c Washington, D.C. 20375	1c1c
1c1d Tel: 202 767-2953 or Autovon 297-2953	1c1d
1c2 Gilbert B. Myers	1c2
1c2a Naval Electronics Laboratory Center	1c2a
1c2b 217 Catalina Blvd. Code 5500	1c2b
1c2c San Diego, Ca. 92152	1c2c
1c2d Tel: 714 225-7044 or Autovon 933-7044	1c2d
1c3 Henry G. Stuebing	1c3
1c3a Naval Air Development Center	1c3a
1c3b Code 552	1c3b

Check Ident Information

1c3c Warminster, Pa. 18974	1c3c
1c3d Tel: 215 672-9000	1c3d
1c4 Jack M. Zyphur	1c4
1c4a Naval Undersea Center	1c4a
1c4b Code 4531	1c4b
1c4c San Diego, Ca. 92132	1c4c
1c4d Tel: 714 225-2721 or Autovon 933-2721	1c4d

2 Regards,	2
3 Frank	3

Check Ident Information

(J32752) 13-JUN-75 14:36;;; Title: Author(s): Frank G.
Brignoli/FGB; Distribution: /JGN([ACTION]); Sub-Collections: NIC;
Clerk: FGB;

Dissertation Draft

Here are chapters I and VI of my dissertation. Chapters II through V are chapters II through V of the OTP report. Output processor directives are included. This is by base draft. My cte and I will hack it out over this one.

Dissertation Draft

RA3Y 13-JUN-75 14:50 32753

7c3f

7c3f

VI RECOMMENDATIONS

8

8a A. Overview

8a

8a1 Our findings have both longer-term and immediate action implications for the Federal Communications Commission. For the long term, our results indicate that the FCC will probably have to alter radically its basic regulatory approach to pay television. For the intermediate term, the next five years or so, the FCC must act to gather the information needed for this change. Immediately, however, the FCC must counteract one highly undesirable feature of the current antisiphoning rules that might delay or even seriously compromise long-term regulatory improvement; this will involve a major program of experimental relaxations of the current antisiphoning rules.

8a1

8a2 In this final section of the report, we discuss why our findings lead us to these policy conclusions. We also discuss in some depth the immediate actions that we feel the FCC must take if continuing regulatory improvement in the long term is to be ensured. Although we would prefer to present an extensive discussion of

longer-term actions the FCC should take, this would be far beyond the scope of this study.

8a2

8b B. Results Having Major Action Implications

8b

8b1 Section V presented conclusions in considerable detail. It is useful, however, to explicitly note conclusions that hold major policy implications.

8b1

8b2 1. Viewing Time

8b2

8b2a Pay television viewing time, according to our analysis, is likely to be restricted by the high price that will be charged on pay television (Pay television now costs over \$1.00 per viewer hour). In addition, not all households will take pay television. Our analysis indicates that only about a fifth of all households will be pay subscribers in the long term. Even assuming that prices fall to a quarter of their current levels, and that every hour of pay television viewing comes at the expense of one hour of free television viewing in prime time, free television's prime time audience would decline by only 11.9 percent in 1985. With more reasonable cross-impact assumptions, the effect would be much smaller. This conclusion is obviously dependent upon the analysis (noted below) that consumers have relatively little demand for additional conventional-type television programming.

8b2a

8b3 2. Movies

8b3

Recommendations

8b3a In theatrical exhibition, movies collect most of their ultimate rentals on the first run. The first reissue generates less than 30 percent of the first run rentals, and subsequent reissues generate even less. As a result, network television can usually outbid theaters for movies after one or two theatrical reissues. Our analysis shows that if rentals decline with pay television reissue at something near the rate they do with theatrical reissue, then the normal network premiere dates of movies will be only slightly affected. It does seem likely that pay television reissue declines will approximate those of theatrical reissues. In both exhibition modes, the audience is offered the program many times on each run, so the audience tends to be saturated quickly.

8b3a

8b3b Unfortunately, current rules (including those adopted since the data analysis was completed) effectively forbid second and higher reissues on pay television. As a result, unless the FCC allows experimentation forbidden under current rules, there will be no adequate data with which to verify or invalidate our analysis.

8b3b

8b4 3. Sports

8b4

8b4a For sports, we had mostly indirect data on consumer demand. We did, however, estimate the relative attractiveness of individual events in different sports compared to the attractiveness of average movies on pay television. For sports that have been shown in substantial numbers on pay television, mainly basketball and

hockey, our predictions are in excellent agreement with the results of pay television exhibition. Unfortunately, for the two most important American sports, baseball and football, there is strong disagreement in our underlying data, and there have been no significant field tests on pay television. For football, projections from our two best data sources differed by more than a factor of two. All of our conclusions concerning sports are therefore imprecise.

8b4a

8b4b To probe the sensitivity of our analysis of this imprecision, we compared current free television rentals and likely pay television rentals for baseball and football, using projections based upon different data sources. We performed this analysis for several types of national and regional networks. In general, our highest projections would imply rough equality of rentals between pay and free television in three to five years, while our lower projections would indicate substantially lower rentals from pay television even in the long term. Thus it seems imperative to collect a significant amount of actual market test data from pay television and to redo our analysis with the aid of these data.

8b4b

8b4c A major question in sports is whether different sports events will be treated as different program categories by consumers. If they are not, then the very large number of sports events available in a typical region would probably saturate demand to the extent that pay operators would only be willing to show some of them. Our analysis of two data sources indicated that consumers do, in

Recommendations

fact, view different types major sports events as being reasonably close substitutes. This finding indicates that analysis of bidding between pay and free television in the case of sports is likely to be very complex.

8b4c

8b5 4. Additional Conventional-Type Television Programming

8b5

8b5a Our analysis found rather low demand among consumers for programs like those already offered on the networks. Essentially, our analysis indicated that the networks have saturated the public's desire for such programs, so that pay television, like theatrical exhibitors, will be pressed to offer more expensive or select audience programs.

8b5a

8b5b This analysis is, in many ways, the pivotal portion of our study. If demand for additional conventional-type television programs is not small but rather comparable to, say, demand for new movies on pay television, then many aspects of our analysis would have to be redone. It is essential, therefore, to test this part of our analysis as soon as possible.

8b5b

8b5c Practically, there is only one way to do this: by offering a large enough number of representative programs on pay television. The data source used in this analysis, consumer purchases of additional network service by means of cable television subscription, seems to be as accurate an analogous data source as possible.

8b5c

8b5d Unfortunately, no program producers seem willing to network-like series for pay television. While this is understandable, in light of our analysis, it means that it will probably take several years to check this crucial portion of our analysis if testing has to be done with made-for-pay-television product.

8b5d

8b5e One form of testing, however, does seem possible in the near future; this is the exhibition of off-network reruns, in substantial numbers, on pay television. Reruns will almost certainly have lower demand than new series, but paycasting reruns can at least determine whether our analysis is grossly in error. The exhibition of reruns on pay television will require a relaxation of current antisiphoning rules.

8b5e

8c C. Action Implications for the Long-Term

8c

8c1 As noted in Section I, the Federal Communications Commission's approach to pay television regulation is predicated on a single principle: absolute protection for advertiser-supported television. Historically, this principle was adopted for pragmatic reasons, not theoretical ones. The FCC created the stringently anticompetitive antisiphoning rules primarily because it could not tell whether pay television would destroy free television under free competition or less stringent rules. Demand data were virtually

Recommendations

nonexistent, and no other course of regulatory action seemed desirable.

8c1

8c2 There are two reasons why absolute protection might validly be maintained indefinitely as the FCC's guiding principle. The first is that free television might be considered a uniquely valuable service. Certainly, consumers do value free television highly. But this reasoning is superficial. As noted in Section I, the average American family is paying about \$75 per year^{<1>} for free television. Although these charges are indirect, they are large and cannot be lightly neglected. Also, the public may be willing to pay more than the 3.2 cents^{<1>} per viewing hour that sponsors can profitably pay, in order to spend part of their viewing time watching programs of greater interest to them than standard network and independent television fare.

8c2

8c3 A second reason to preserve the current regulatory approach would be if pay television really would cause severe damage to free television, or even modest harm not offset by greater gains. In other words, if the FCC's concerns when it created the antisiphoning rules prove well-founded, then something akin to absolute protection would seem desirable.

8c3

8c4 But if consumer demand for pay television is only moderate, so that even under open competition advertiser-supported television would be harmed only modestly and there would be simultaneous gains

to the public under open competition, then the FCC would probably be forced to take a broad view of television, seeing it as a system of service financed by a full complement of mechanisms, including direct consumer payments, advertising, and public grants.

8c4

8c5 This salutary-competition outcome would certainly not be new in regulatory history. For example, when the Interstate Commerce Commission first regulated trucking, it viewed highway transport merely as a competitor to a uniquely valuable rail system. Where there was a rail line between two points, trucking was routinely forbidden, even if rail service were poor<22>. In time, of course, a more balanced view was forced upon the ICC. First, it became clear that trucking also had unique and complementary benefits; while rail was slow but inexpensive, trucking was fast but expensive. Second, it became increasingly obvious that the public would not be harmed if considerable competition were allowed, because benefits from an excellent trucking system were being understood by the Commissioners.

8c5

8c6 Unfortunately, these realizations came slowly, and the ICC's regulatory approach was trapped in numerous cul de sacs that prevented the full evolution of a full system of public and commercial transportation. While rough equality between the two modes was achieved, numerous legal and intellectual precedents had been set and the ICC had to constantly adjudicate claims on grounds only loosely connected to economics and the public interest.

8c6

Recommendations

8c7 It is impossible to say, with today's rough knowledge, what a full system of television financing would bring. We can, however, sketch a few generalities that give the possible flavor of the future.

8c7

8c8 It may well be, if our analysis is correct, that harmful competition would be negligible under open competition, i.e., that siphoning is a nonissue. Certainly the movie theater industry, which we noted in the Introduction is very large, has helped rather than harmed free television in the total absence of anticompetitive regulations. Our analysis indicates that the same basic mechanism that caused helpful competition in the case of theatrical exhibition, namely the public's demand for programs more expensive to produce than those shown on free television, is present in pay television. However before more confident projections can be made, better data are needed.

8c8

8c9 Note that helpful competition does not imply negligible interactions. The movie theater industry and the television industry are both buyers for the same product. Instead, helpful competition implies that the two media have synergies. In the case of movies and free television, both media finance the production of more expensive programs than either alone could fund. Yet their audiences are sufficiently disjoint that prior exhibition in theaters does not destroy a movie's value on free television.

8c9

8c10 In essence, future regulation will have to focus broadly on the system that finances video production and distribution. Today there are essentially three stages in the flow of products: live attendance, exhibition on a primary network, and subsequent exhibition on independent television stations. Pay television will probably change the flow of programs through these markets in three ways: by increasing the volume (and perhaps the quality) of programs, by creating a new set of made-for-pay-television programs, and by changing the timing of flows. Needless to say, if pay television demand is negligible, its impacts will be slight. At the same time, if pay television demand is substantial (generally more substantial than our study indicates), the flows will be changed substantially, just as they did when free television changed the flow pattern in the 1950's. However the greater the change in the flow structure, and so the greater the impact on advertiser-supported television, the greater will be pay television's ability to generate the types of programs that free television can offer later, and the greater will be the intrinsic public value of pay television.

8c10

8c11 How do the results of our study fit into this overall picture? Basically, our results indicate that pay television demand will not be not large enough to cause severe harm to free television, although present data are not sufficiently precise to allow us to project whether potential interactions will be negligible or modest. While this is insufficient to decide among new alternatives, it is

sufficient to show that the principle of absolute protection for free television, upon which the current rules were predicated, is unsupported. It is also sufficient to indicate that the FCC's past policy of making relatively cosmetic and "fine tuning" changes to its current rules is probably inappropriate. Unless our analysis is fundamentally incorrect, the FCC will eventually have to deal with a situation of at least rough equality between pay television and free television. In order to avoid the frustrations and problems that faced the ICC in its regulation of highway transport, the FCC should take immediate actions to prepare for fundamental changes in its regulatory approach.

8c11

8c12 In this study, we cannot begin to discuss alternative regulatory patterns for pay television. This is a large subject area and, more immediately, the data to even formulate alternatives well is not yet available. Instead we will discuss some general things the FCC should do during the next five years and some immediate actions that are needed.

8c12

8c13 The FCC will be faced with difficult tasks in the future that may take it beyond its traditional posture as a disposer of suggestions rather than as a proposer of alternatives. As a practical matter, the FCC will probably have to rely upon outside agencies to make proposals, yet, as we discuss below, the FCC must begin to develop the types of expertise that will allow it to decide among future alternatives that will be presented to it, and there are

certain immediate actions the FCC must take to ensure that sound long-term regulation for pay television will be created.

8c13

8d D. Action Implications for the Next Five Years

8d

8d1 For the FCC to eventually revise its approach to pay television, certain things must be done during the next five years. First, alternative regulatory patterns must be explicated. It is likely that theoretical formulation will come not from the FCC but from agencies freer to initiate major policy changes, for example other governmental agencies, foundations or industry lobbies. It seems essential that the FCC have suitable alternatives to select among when the quantitative data sufficient for reassessment becomes available.

8d1

8d2 Second, either the FCC or another agency must assemble the data that will become available during the next five years. As noted in Section V, the pay television industry will generate large amounts of data during the next three to five years. But this data must be collected if it is to be useful.

8d2

8d3 To make sense of future data, however, some model for pay television's growth and for economic interactions between pay television and free television will be needed. In this study, we have modeled these processes to the first approximation only, and future research must include the more sophisticated modeling that will be possible as more detailed information becomes available.

8d3

Recommendations

8d4 Although future models will be more sophisticated than our own, they will probably follow the basic steps we took. To quantify national subscribership and revenue growth, five steps will probably be required. First, a model for community demand when some base programming package is available must be generate and quantified. Second, the response of individual households to expansions of the program mix must be modeled. Third, subscribership and revenue growth within a community as the program mix broadens must be modeled. Fourth, the expansion of STV's and pay cable's availability to consumers must be modeled. Fifth, these models must be quantified.

8d4

8d5 To quantify economic ineractions between pay television and free television, however, much more sophisticated modeling seems needed; we a program modeled "siphoning," in which pay television would get programs if it could provide higher rentals for it than free television. This is sufficient if rentals for the two media are very different. But if revenues are within an order of magnitude or so, then marginal analysis will be needed. Models will have to take into account that both pay television and free television have many programs available to them, so the marginal revenues and costs of individual programs can only be understood if a broad range of information is available. Furthermore, it is not enough to model bidding alone; regulators are concerned with the effects of competition on the public, so if some programs are lost or gained,

the impact upon the public will depend upon the programs presented in their place. It is also necessary, in order to assess the value of competition, to weigh benefits and losses to the public from both media under open competition. Overall, however, the closeness of economic interactions will dictate what level of analysis is needed. 8d5

8d6 Although more sophisticated modeling will probably be needed eventually, our model should be sufficient to organize general data collection in the near future. As more data become available, several less precise parameters of our model can be remeasured and new projections made. At the very least, new data could be able to subject our model to fairly critical testing. 8d6

8d7 Some parameters of our model can already be measured. For example, when we performed our analysis, only a handful of pay cable systems were built on low-penetration host cable systems. On the basis of available evidence, however, we developed a model to project pay cable demand in any community. For a per-channel pay cable system charging \$8.00 per month and offering 10 new movies each month, for example, we estimated that 23 percent of all initial cable subscribers and 7 percent of all noncable households would take pay television. 8d7

8d8 Since our analysis was completed, several pay cable operations on low-penetration host cable systems have since been in service long enough to provide useful data. Agreement between their

Recommendations

results and our model is excellent. The only public example now available illustrates this agreement; this is the pay cable operation on the Theta Cable system in Los Angeles, California.

8d8

8d9 Before pay cable was offered on this cable system, its community penetration was 18 percent<23>. According to our model, the introduction of pay cable should increase cable penetration to something less than 24 percent*; Theta Cable's penetration actually jumped to 25 percent<23>. Our model also projected that 42 percent of these final cable subscribers should be pay cable subscribers*; this is exactly the percentage achieved by Theta Cable<24>.

8d9

8d9a

*Actually, because Theta Cable charges only \$6.95 per month<23> for the service, rather than the \$8 in 1974 prices (roughly \$9 in 1975 prices) that we used in our calculations, our projections for penetrations might not be upper bounds. Our projections for revenues (price times penetration), however, should still be upper bounds.

.....

8d9a

8d10 While this agreement between our model and actual demand for today's program mix is satisfying, our projection of demand growth into the future is less certain, and our projections of demand for individual movies, events, additional conventional-type television programming, etc., are also imprecise. Hopefully, if our

projections really are upper bounds*, future data will reduce our estimates. However, because we attempted to estimate reasonable upper bounds, some of our parameters may have to be reestimated upward.

8d10

8d10a

*Note that beyond 1980 uncertainties become large enough to make reasonable upper-bound estimation less precise.

.....

8d10a

8d11 In the end, whether our model or some other model is used to organize the large flux of data that will be generated, it should soon be possible in three to five years to lengthen greatly the time horizon of upper-bound projections. It seems almost certain that the FCC will soon have sufficient data to make long-term regulatory changes, provided it acts decisively to gain access to these data, to organize these data, and to generate optional policies among which to decide.

8d11

Be E. Immediate Action Implications

8e

8e1 1. Specific Information Needs

8e1

8e1a We have remarked that without experimental relaxations it will be very difficult, probably impossible to collect certain data. As a result, there will always be a residue of needed but uncollectable data in areas that must be understood well if potential

interactions between pay television and advertiser-supported television are to be estimated precisely enough for regulatory change. We now discuss specific areas of concern.

8e1a

8e1b For movies, the question is how rapidly rentals will decline with subsequent reissues on pay television. If theatrical experience is a guide, declines will vary from movie type to movie type and from movie to movie in general. Consequently it is essential to gather data from a large number of pay television reissues -- not only for reissues in the first two or three years after the start of general theatrical release, but for reissues far enough in the future that interactions with network showings would be possible. Unless distant reissue patterns are known precisely, there may be large uncertainties in estimated potential interactions, since these interactions will depend on the incremental rentals from a reissue which brings in a small fraction of first-issue rentals.

8e1b

8e1c To ensure the generation of sufficient movie reissue data, it seems best to create a full relaxation of the movie rule for a period of at least three years. We recommend that a three-year moratorium on the movie rule be declared on certain pay operations, and that this be extended three more years if results from the first three years make this appropriate.

8e1c

8e1d For additional conventional-type television programming, it is essential to test whether demand is really small,

Recommendations

as our analysis indicates that it is. Even a relatively gross test would be sufficient to test central aspects of our analysis, for example whether our extrapolations are being materially distorted by the fact that some of cable television's attractiveness comes from the cleaning up of local signals as well as from the importation of distant network signals. It is essential that a large number of off-network reruns be shown on pay television, because the demand for such programs is likely to decline as more are offered. It is only if pay television is able to bid on a large number of programs that siphoning will be a serious regulatory concern.

8e1d

8e1e As in the case of movies, a full moratorium on the series rule, on certain pay operations, for a period of three years plus an optional three-year extension, seems appropriate. Because most off-network reruns come with advertising, a concurrent relaxation of the advertising prohibition should also be created.

8e1e

8e1f For sports, there are likely to be two periods to the data collection. In the next two or three years, initial data on demands for individual baseball, football and other key sports events will be generated, allowing raw bidding potentials for pay television and free television to be assessed. Later, it may be appropriate to determine the marginal revenues and costs of exhibiting different types of sports on pay television, if raw bidding potentials appear roughly equal. This will allow marginal revenues, costs and opportunity costs to be assessed, so that potential economic

Recommendations

interactions can be estimated. Another key issue is to what extent different types of sports events are viewed as substitutes by consumers. Substitutability, which is central to marginal revenue analysis, can be determined roughly during the next three to six years, perhaps determined well by the end of that period.

8e1f

8e1g Again, a full relaxation of the sports rule for certain pay television operations is desirable in order to collect the volume of data that will give a reliable data base. A three-year relaxation, followed by an optional three-year relaxation also seems appropriate, since data from the first three years will allow a determination of whether a second relaxation period can be created safely.

8e1g

8e1h For the sports rule, however, there is one concern. Our maximum upper-bound estimate indicated that networks made by interconnecting STV stations in a region might produce measurable interactions during the relaxation period. However STV seems likely to emerge considerably more slowly than our projection indicates and network interconnection should come even more slowly. So it still seems appropriate to extend relaxation of the sports rule to STV stations.

8e1h

8e1i One factor that cuts across these three categories is the need to collect a large amount of data. In part, a large quantity is needed because of expected program-to-program variances.

A greater need for quantity, however, stems from the fact that the FCC must determine how much interaction will be needed in the future if it to adopt a systems approach to television financing, not simply whether any interaction will occur. This requires sufficient data to reliably estimate marginal demand for individual programs.

8e11

8e2 2. Difficulties and Their Solution

8e2

8e2a The recommendation for experimental relaxations is not a new one. Since late 1972 pay television spokesmen have been calling for a national moratorium on the rules. In general, two reasons have been cited for a moratorium. First, it would give the fledgling pay television industry more product to grow upon. Second, it would probe whether the antisiphoning rules are really necessary. This analysis, being an upper-bound estimation, does not bear upon the pay industry's possible need for programming. Its findings concur, however, on the need to probe the antisiphoning rules.

8e2a

8e2b The FCC has been nearly silent on past recommendations for moratoria. It seems to be, however, that three factors are causing the Commission to reject moratoria. The first is the problem of "grandfathering." Even if it is made clear to pay subscribers that they are seeing certain programs on an experimental, limited-term basis, it might be impossible to take programming away later.

8e2b

8e2c The second factor is the selection of pay television

Recommendations

systems (to reduce the grandfathering problem), by granting variances to only some pay television operations but not to others. Simply the mechanics of deciding among competing applicants would seem to be a major chore. Furthermore there might be political pressures to favor certain regions or at least to balance geographically the operations receiving variances.

8e2c

8e2d The third factor is tied to the other two. This is the cost/benefit of a program of experimental relaxations. If the FCC commits itself to a program of experimental relaxations, this will consume staff time in the analysis of results, and there may be pressure to radically alter the composition of the current rules or even to scrap them entirely. This could place a major burden on the Commission's staff.

8e2d

8e2e None of these factors, however, should be debilitating. Most directly, the fact that a program would consume Commission resources ignores the potential (and by our results, probable) need to create a new regulatory approach to pay television. Television is a very important service in America, and the FCC cannot validly ignore the benefits that a mixed system of financing production and distribution has brought to the print medium and to movies.

8e2e

8e2f Burdens on the FCC, however, can be greatly reduced by requiring operations that take advantage of a moratorium to collect

Recommendations

their own data and to submit them in a standard form, which we discuss below. This will not eliminate staff burden, because some analysis will still be needed within the FCC, but it should reduce the burden to an acceptable level. Furthermore, if the data are made public (subject to the reporting form protecting the privacy of individuals and the pay television corporation's identity), outside organizations are likely to submit analyses of their own.

8e2f

8e2g Both grandfathering and the selection of operations can be addressed with a single tool. This is the creation of a national moratorium in which participation by pay operations is voluntary, but in which only operations that agree to provide certain proprietary data may participate. This will eliminate the selection problem entirely, or at least reduce selection to well-defined technical characteristics of the pay operation. Because participation will be dependent upon the submission of proprietary data, participation should be somewhat limited, reducing the grandfathering problem.

8e2g

8e2h This approach solves the selection problem cleanly. It does not solve the grandfathering problem as nicely. However grandfathering does not seem to be a major problem to begin with. By the end of 1978, even by our upper-bound estimation, the pay industry seems likely to be only about a third of its ultimate size. Even if virtually all pay operations participate, there seems to be little danger of grandfathering a national system of pay television.

Recommendations

However it would definitely seem unwise to wait much longer to create a program of experimental relaxations.

8e2h

8e2i To further reduce the danger of grandfathering whole regions, a quota should be set, in which no more than 25 percent, say, of all cable subscribers in a region should be served by participating operations. To select operations to meet this quota, successive random selection from applications would be made until the limit is reached. For STV, only the first operating station in each of the STV networks defined by Table IV 9 would be permitted to participate.

8e2i

8e2j The Hartford STV experiment of the 1960's obviously motivated our proposal to remove difficulties by creating a participative program. However we have attempted to overcome the main difficulties of that experiment by defining exact data to be supplied by applicants. Most importantly, this means that selection need not drag on for months or even years. It also means that the FCC is unlikely to be stuck with the results from a single pay television operation.

8e2j

8e3 3. Criteria for Participation

8e3

8e3a We have discussed how the preselection of minimum data to be provided will eliminate or satisfactorily reduce the major road blocks to a program of experimental relaxation. We now discuss the rather simple data that should be required. We discuss per-program

Recommendations

and per-channel charging separately, because these can provide different data. STV and pay cable are not discussed separately; although it is useful to compare STV and pay cable operations using the same charging mechanism, the data submitted would be identical.

8e3a

8e3b

a. Per-Program Operations

8e3b

8e3b1 Per-program operations must first provide data on growth of their penetration in the community over time. If the pay operation is cable-based, growth in the penetration of the host cable system over time and the fraction of cable subscribers taking pay television must also be reported. For pay penetration, reporting should begin from the pay system start-up date; cable penetration history (if applicable) must be reported from a year before start-up (but not going back more than three years). If the pay company can report penetration in terms of the number of homes to which pay television has been marketed or is available to, this must be reported.

8e3b1

8e3b2 If any consumer survey has been performed previously, portions that relate pay television and cable (if applicable) penetration to consumer demographic characteristics must be reported. A brief demographic profile of the community and service area(s) must be provided. The applicant must also agree to do one demographic survey of the service area each year and to obtain demographic data from its subscribers. At a minimum,

Recommendations

demographic information must include average age of the heads of the household, pre-tax annual income from all sources, and number of persons in the household who are living there and can watch pay television with some regularity.

8e3b2

8e3b3 For each run of each program shown during the moratorium, the cumulative percentage of subscribers purchasing the program, the price charged, and the number of showings must be reported. Correlations among all programs (within a single calendar year) and among individual programs and household demographics must be reported. For movies, the percentages of subscribers purchasing a movie during the first run and each subsequent reissue must be reported.

8e3b3

8e3b4 All data must be reported for each calendar year, within three months after the end of the calendar year.

8e3b4

8e3c b. Per-Channel Operations

8e3c

8e3c1 Per-channel operations must first provide data on growth of their penetration in the community over time. If the pay operation is cable-based, growth in the penetration of the host cable system over time and the fraction of cable subscribers taking pay television must also be reported. For pay penetration, reporting should begin from the pay system start-up date; cable penetration history (if applicable) must be reported from a year before start-up (but not going back more than three years). If the pay company can

report penetration in terms of the number of homes to which pay television has been marketed or is available to, this must be reported.

8e3c1

8e3c2 If any consumer survey has been performed previously, portions that relate pay television, cable (if applicable) penetration to consumer demographic characteristics must be reported. A brief demographic profile of the community and service area(s) must be provided. The applicant must also agree to do six demographic survey of the service area each year and to to obtain demographic data from its subscribers. These surveys may coincide with ratings collection described below. At a minimum, demographic information must include average age of the heads of the household, pre-tax annual income from all sources, and number of persons in the household who are living there and can watch pay television with some regularity.

8e3c2

8e3c3 At least six times each year, the pay operation must conduct a ratings probe of its service area. This probe may use any reliable testing means but must be capable of resolving ratings to within a probable accuracy of plus or minus three ratings points. Any probes conducted in the service area must be reported. The parent company of a participating operation must conduct no greater number of probes on any of its nonparticipating operations than the average number performed on its participating operations.

8e3c3

Recommendations

8e3c4 For each program measured during these ratings probes, the cumulative percentage of subscribers purchasing the program and the number of showings must be reported. If possible, correlations among programs (within a single probe) and among individual programs and household demographics must be reported. For reissues shown during the probe, first-run ratings must be reported if available and each household probed should be asked if anybody in the household has previously viewed the movie on pay television, on the current operation.

8e3c4

8e3c5 If there are several participating per-channel operations in a television market, it will be permissible for these operations to cooperate in conducting ratings probes. However, the number of regional probes that must be conducted will rise to six plus the number of operations participating. In addition, at least seventy five percent of the programs offered by different systems during the sweep period must be identical.

8e3c5

8e3c6 All data must be reported for each calendar year, within three months after the end of the calendar year.

8e3c6

8e3d C. Per-Channel Versus Per-Program Data

8e3d

8e3d1 It is obvious that per-program operations offer a greater precision of information than per-channel operations. On the other hand, there will be many more per-channel than per-program operations during the next six, and especially the next three, years.

Per-channel systems will therefore provide a rather large volume of information on viewing patterns.

8e3d1

8f F. Summary of Recommendations

8f

8f1 Our results indicate that the fundamental principle upon which the current pay television regulations are based, i.e., absolute protection for advertiser-supported television, is not well-founded. This principle was created in the mid-1960's, when a lack of information about consumer demand for pay television made stringent anticompetitive regulations a prudent choice. The data presented in our study, however, indicate that pay television demand will not be so large as to swamp free television in the absence of regulations. Rather, our upper-bound projections indicate negligible to moderate economic interactions. If these results are correct, then the FCC should immediately begin to reassess its fundamental policy toward pay television regulation.

8f1

8f2 For the long term, the FCC must develop a regulatory policy appropriate for a situation in which pay television and free television are viewed as a joint system for financing television, a system which already includes network television, independent television, movie theaters, sports arenas and cultural theaters. If pay television affects this system negligibly, little regulation of pay television will be needed. But if pay television changes the current system materially, the FCC must develop regulations to ensure

Recommendations

that changes are beneficial. These regulations need not be strongly anticompetitive; theaters and television, for example, compete for theatrical movies, but their joint revenues allow the production of more expensive movies than either could afford alone.

8f2

8f3 This long-term regulatory change will not come immediately. At present there is too little data to even formulate alternative regulatory approaches precisely, much less to select among them. Yet the FCC and other organizations must take decisive steps in the near future if future approaches are to be well-founded. Some organization, for example, must formulate proposals for alternative regulations soon, so that when hard data become available, alternatives will be understood and ready for implementation. This formulation must be done fairly soon because, as indicated in the Conclusions (Section V), a great deal of information will soon be available, and the FCC must organize itself to assimilate and understand future data, so that it can act rapidly.

8f3

8f4 It is important that general policy formulation and data collection come quickly. In the past, for example in the case of trucking-train competition, an agency (in this example, the Interstate Commerce Commission) have tended to adopt a policy of absolute protection for a conventional medium, only to find later that the public would best be served by a system that treats both the new entrant and the established server as equals. By the time the need to scrap the anticompetitive policy becomes has become realized,

Recommendations

however, intellectual and legal precedents have tended to make conversion very difficult and ultimately incomplete.

8f4

8f5 While all future actions will be important, there is one pressing and critical action that the FCC must take in the very near future if needed data are to be available when needed. This is to create a fairly broad program of experimental relaxations to the current antisiphoning rules. These rules forbidding pay television to offer programs roughly like those shown on free television today. But the rules have another, undesired, effect: they tend to prevent precisely the kinds of market tests that are needed to collect data critical to the estimation of potential economic interactions between pay television and free television. Unless a substantial number of pay systems are given limited-term exemptions from the antisiphoning rules, the large amount of data that will be generated naturally by pay television during the next three to five years will be insufficient for regulatory action. There will remain a large and critically-placed core of uncertainty about potential interactions. If relaxations are allowed, on the other hand, there should be sufficient data for rather decisive regulatory actions.

8f5

8f6 Experimental relaxations have been proposed to the FCC in the past, and the FCC has rejected these proposals on several grounds: that too many pay systems would be grandfathered by such relaxations, that it would be politically impossible to select pay operations "for special treatment", and that the results would be

Recommendations

insufficient for the resources they would require. All of these reasons, however, presuppose that current regulations are well-grounded, and that only relatively cosmetic changes need to be made in the future. If strong revisions may be needed, however, these argmenents break down.

8f6

8f7 Overall, the FCC stands at a crossroads today. It has created a new addition to the financial structure of video, which is now a \$6.4 billion dollar industry including conventional television and movie theaters. Television is now viewed about 6 hours a day<1> by the average household and represents America's dominant source of fiction, entertainment, and national news. While the current value of "free" television, which costs the average household about \$75 per year is indisputable, this only stresses the importance of home-video service to the public. If pay television can substantially change this system of financing, or change it even modestly, the potential benefits of a open competitive regulatory policy to the public interest may be very large. The FCC must begin to probe the benefits of a full system of television financing instead of simply trying to preserve the current financial system, itself a historical accident, as an unalterable regulatory absolute.

8f7

References

RA3Y 13-JUN-75 14:50 32753
Page 192

References

9

REFERENCES

- 9a 1. ----- "A Cold Front of Realism Crosses Cable's Blue Sky,"
Broadcasting, Vol. 88, No. 16, p. 38 (April 21, 1975). 9a
- 9b 2. ----- "High Budgeted 'Ado' Near Nielson Bottom," Broadcasting,
Vol. 88, No. 8, (February 19, 1975). 9b
- 9c 3. ----- "From TV to Print and Back Again: IBM Hopes to Score,
Broadcasting, Vol. 85, No. 1, (July 9 1973). 9c
- 9d 4. ----- "'Much Ado' Praised by Critics, Dies at Box Office, in
ratings," Broadcasting, Vol. 84, No.6, p. 62 ff (February 12, 1973) 9d
- 9e 5. ----- "Program Briefs," Broadcasting, Vol. 86, No. 5, p. 38
(February 4, 1974). 9e
- 9f 6. "'The Ascent of Man' Topic of TV Course Offered by SBCC,"
Santa Barbara News Press, p. 32 (December 21, 1974). 9f
- 9g 7. Doan, R.K., "The Doan Report," TV Guide, p. A-1 (February
22-28, 1975). 9g
- 9h 8. Head, S.W., Broadcasting in America, 2nd. Ed.
(Houghton-Mifflin, 1972). 9h
- 9i 9. White, L., "Ragtime to Riches," in Schramm, W., Ed., Mass
Communications, 2nd Ed., (University of Illinois Press, 1960). 9i

References

RA3Y 13-JUN-75 14:50 32753
Page 194

91

91

References

- 9k 22. 49 U.S. Code 307(a), 1964 ed., quoted in Khan, A.E., The Economics of Regulation, Volume II: Institutional Issues, p. 15 (Wiley, 1971). 9k
- 91 23. ----- "Future Seen Now in Satellite Networking as HBO, UA-Columbia Pact First Affiliation, Broadcasting, Vol. 98, No. 16, p. 16 ff (April 21, 1975). 91
- 9m 24. ----- "Pay Cable: Light at the End of the Tunnel for Teleprompter?" Broadcasting, Vol. 88, No. 20, p. 58 (May 19, 1975). 9m

Dissertation Draft

(J32753) 13-JUN-75 14:50;;; Title: Author(s): Raymond R.
Panko/RA3Y; Distribution: /GCE([INFO-ONLY]) ; Sub-Collections:
SRI-ARC; Clerk: RA3Y; Origin: < PANKO, MASTER.NLS;20, >,
12-JUN-75 14:22 RA3Y ;;;; .Widows=5;####;

Delete modifications command in 'process commands branch'

1 I'm building a short demo using the process command branch capability and I have run into a snag with the above command and I hope one of you out there can help me..
When the system comes to the "Delete Modifications" in the branch, it stops at "Modifications". it does not echo (to file) really? it just stops and does nothing..I have to abort to get out of it..
If I jump to the address where that command is and apply the process branch command, it works..I have the required two <CA>. why doesn't it work when I start the process from the top?

1

IMM 16-JUN-75 06:27 32754

Delete modifications command in "process commands branch"

(J32754) 16-JUN-75 06:27;;; Title: Author(s): Inez M. Mattiuz/IMM;
Distribution: /KWAC([ACTION]) FEEDBACK([INFO-ONLY] Sandy, you
misunderstood my question, i have sent this to the others as i know
they have made up some of these branches) ; Sub-Collections:
BELL-CANADA KWAC FEEDBACK; Clerk: IMM;

Line Processor Problems --- in TENEX

1 Martin, The Line Processor no loners works properly in TENEX. The key-set does alright, but the mouse keys, CA, CD, ESC, do not function. Sometimes! the combinations of the left-hand button and five keys (= CR) will work. Is this some problem with Version 1.33 of TENEX, or with our Line Processor? Stan.

Line Processor Problems --- in TENEX

(J32758) 17-JUN-75 05:13;;; Title: Author(s): Stanley (Stan) M. Taylor/SMT; distribution: /MEH([ACTION]) JCN([ACTION]) FEED([ACTION]) DCE([INFO-ONLY]) JHB([INFO-ONLY]) DFT([INFO-ONLY]) SGR([INFO-ONLY]) ; Sub-Collections: NIC; Clerk: SMT;

NSW Measurements and Evaluation Office

Mike and Bill: Attached is draft of section for NSW plan, part 3a6, pertaining to the measurements and analysis office. This piece deals with only productivity and user satisfaction. I could not remember if we were also going to task that office with measuring response times, efficiency, and such; if so, we need to add some to this.

***MIKE: Were you successful at capturing the plan? if so, I'll let you merge this in at the appropriate spot.
Comments/complaints/suggestions?

NSW Measurements and Evaluation Office

1 *****NSW Measurements and Evaluation Office

1

1a There is a continuing need for an office charged with the responsibility of providing techniques and manpower to measure the effect of using the tools and facilities provided by the NSW upon the individual users and the organizations of which they are a part. An Office of Measurements and Evaluation will be formed to fill this need. At this time, its functions are relatively clear, but an organization with the expertise and experience to fulfill this responsibility has yet to be selected. One of the first duties of the Program Management Officer will be to prepare a proposal for Steering Committee approval, designating the organization selected to be the Measurement and Evaluation Office.

1a

1b Tasks:

1b

1b1 The Measurements and Evaluation office will be charged with the following responsibilities:

1b1

1b2 To develop measures and procedures for evaluating productivity of data automation personnel. This includes at least the following categories :

1b2

1b2a System Analysts

1b2a

1b2b Development Programmers

1b2b

1b2c Maintenance Programmers

1b2c

1b2d Documentors

1b2d

1b2e Administrative Support Personnel

1b2e

1b2f (Project Managers?)

1b2f

1b3 To select, evaluate, and prepare data on productivity of representative groups of such personnel at AFSDC, both with and without NSW. Care must be taken in the handling of these tests to insure no bias is allowed to creep in, as the results will bear heavily on both the future direction and speed at which the project moves.

1b3

1b4 To prepare an evaluation on the economic costs and benefits of NSW support on the test group, and to extrapolate as closely as possible the economic trade-offs as applied to the full Center. The evaluation should be briefed to both AFSDC and NSW management.

1b4

- 1b5 To perform, at a somewhat later date, a similar analysis of AFDSC use of NSW 1b5
- 1b6 To recommend, where appropriate, changes in the concepts of operation to improve the cost effectiveness of the NSW operation. 1b6
- 1b7 To document the methods and results in detail, so that similar tests can be carried out by new members of the NSW community as they join. 1b7
- 1b8 To serve as a central clearinghouse of techniques and results of productivity measurements in the software development environment. 1b8
- 1b9 To maintain constant visibility over the success of NSW efforts to increase productivity; to perform additional testing where appropriate as new features and facilities are added to the NSW; to propose and implement new procedures and measures as appropriate. 1b9
- 1b10 To gather and evaluate user and management reaction pertaining to non-quantitative measures of project success, including user and management reaction to the system, changes in work patterns, job satisfaction, etc. 1b10

NSW Measurements and Evaluation Office

(J32759) 17-JUN-75 05:58;;; Title: Author(s): Lawrence A.
Crain/LAC; Distribution: /MAW([ACTION]) WEC([ACTION]) NSW([
INFO-ONLY]) ; Sub-Collections: NIC NSW; Clerk: LAC; Origin: <
CRAIN, MAO.NLS;3, >, 17-JUN-75 05:44 LAC ;;;;####;

Datamedia Keyboards

Sorry I am late in a response to you question about the datamedia keyboards. After a week off, I Xm just now getting to the backlog of mail.

1 Keyboards

1

1a I am in full agreement with you, Frank. The Datamedia keyboards are at best second rate (and that's being complimentary). I find that I have serious problems with the keyboard producing characters which were not typed. It seems that you can get strange characters when you do not use enough pressure on the keys. Our biggest problem is with these keyboards and the use of TELNET (in ELF). The keyboard will, during a session, throw in at least one character that is the escape character for TELNET. This causes my job to become detached and I must re-establish contact with Office-1 then attach the detached job, then try to pick up where I was at the disconnect time.

1a

1b The keyboard is continuously throwing in ... <UKC>.. unknown characters. During a session I will have several of these within the text.

1b

1c It seems unfortunate that such a sophisticated software and hardware system must have such second rate keyboards. What ever price SRI paid for them was twice what they are worth.

1c

2 Process commands Branch

2

2a During the last KWAC meeting some one had a scheme for putting a loop within a Process Commands Branch. The would enable the user to loop through the commands a given number of times before reaching the end of the branch. Does anyone know how this is done? Can you pass that information along to the KWAC people for their use?

2a

Datamedia Keyboards

(J32760) 17-JUN-75 07:17;;; Title: Author(s): Robert M.
Sheppard/RMS2; Distribution: /AID([INFO-ONLY]) ; Sub-Collections:
NIC AID; Clerk: RMS2; Origin: < SHEPPARD, AID.NLS;2, >,
17-JUN-75 06:24 RMS2 ;;;;###;

1 USER SERVICES WEEKLY REPORT from JMB - on vacation 1
 2 USER SERVICES WEEKLY REPORT from SGR - on travel 2
 3 USER SERVICES WEEKLY REPORT from RH 3

3a MON Time: 8 hrs charge ==> Sick Leave 3a
 3b TUES Time: 6 hrs charge 9259-5 ==> ARPA 3b
 3c TUES Time: 2 hrs charge 720D62COY ==> ARPA 3c
 3d WED Time: 6 hrs charge 9259-5 ==> ARPA 3d
 3e WED Time: 2 hrs charge 720D62COY ==> ARPA 3e
 3f THUR Time: 5 hrs charge 9259-5 ==> ARPA 3f
 3g THUR Time: 3 hrs charge 720D62COY ==> ARPA 3g
 3h FRI Time: 8 hrs charge ==> Vacation 3h

3i Note: Worked mainly on the ARPA Orders this week, spending a lot of time with Ginny Gross. I'm probably 3/4's of the way through with them, though some sections are in the final stage already. I had two big moments this week when I helped two different people figure out their passwords. I also assisted Terry Coleman with the MRAO's. Apparently she is the only person who is using our method consistently though there is a big push for people to use them on a regular basis. Mailed a few things back to Martin. The only thing I have to add is that the system was a real PAIN this past week. I suddenly found myself responsible for the crash on Tuesday, etc. which really slowed up everybody's work (mine included). I was getting so frustrated because it was taking me so long to do simple editing. Oh well, enough complaining. 3i

4 USER SERVICES WEEKLY REPORT from PKA 4
 4a MON Time: 8 hrs charge 750D32 ==> at SRI-ARC 4a
 4b TUES Time: 8 hrs charge 750D32 ==> at SRI-ARC 4b
 4c WED Time: 8 hrs charge 750D32 ==> at SRI-ARC 4c
 4d THUR Time: 8 hrs charge 750D32 ==> at SRI-ARC 4d
 4e FRI Time: 8 hrs charge 750D32 ==> at SRI-ARC 4e

4f Note: Monday morning there was a meeting with Bill Carlson and Larry Crain. (All ARC) This was very general information. Worked on the final report, sec 4. After lunch Jim Norton asked me to someone a mini-course/demo. This was Mr. Donchin from the Univ. of Ill. He seemed to be interested in comparing Forum/teleconferencing with NLS sendmail. Showed him how the journal works and how it's structured. Later was a meeting for arc-applications and Carlson.

4f

4g Tuesday-worked on the final report. Spent some time implementing a much needed process commands branch in my mess.txt file. And is it ever screwy.

4g

4h Wednesday- completed 2 more sections of the final report. Had a brief conference with Jake and worked for the NIC

4h

4i Thursday-worked 6 hours for NIC. Completed sec 14 of the final report.

4i

4j Friday-completed sec 15 of final report. Worked 5 hours for NIC.

4j

5 USER SERVICES WEEKLY REPORT from PAW2:

5

5a MON Time: 8 hrs charge 750D32 COY ==> at SRI-ARC

5a

5b TUES Time: 8 hrs charge 750D32 COY ==> at SRI-ARC

5b

5c WED Time: 8 hrs charge 750D32 COY ==> at SRI-ARC

5c

5d THUR Time: 8 hrs charge 750D32 COY ==> at SRI-ARC

5d

5e FRI Time: 8 hrs charge 750D32 COY ==> at SRI-ARC

5e

5f Most of Monday morning was spent in a meeting with all of us from Applications and with the guests from ARPA. Those from ARPA gave brief sketches of their work, providing us with organizational charts, outlines etc. Monday afternoon I edited the third chapter of the final report to be sent to the people at ARPA dealing with Useroptions. Tuesday I worked on editing two more chapters of the final report, Help and Calculator. Wednesday morning more editing work on the final report. Wednesday afternoon and Thursday I did editing for NIC-WORK, working on the Host-Address Master file. Thursday afternoon PKA went over inserting an edge with me, I experimented some with that. Friday, more editing on both the final report and the NIC-WORK file for Jake. Am sensing some tinges of frustration in continually using the same editing commands. I feel like there is yet an ocean of material for me to learn, but yet I am being subjected to very

little of it. Perhaps I should start taking breaks from the continuous editing and begin experimenting with some of the new material I have yet to try, covered in the third course?

5f

(J32761) 17-JUN-75 11:26;;; Title: Author(s): Pamela K. Allen/PKA;
Distribution: /US([INFO-ONLY]) JCN([INFO-ONLY]) ;
Sub-Collections: SRI-ARC US; Clerk: PKA; Origin: < ROETTER,
USREPORT.NLS;10, >, 17-JUN-75 11:20 PKA ;;;;####;

RA3Y 17-JUN-75 17:37 32762

ARPA-NSW Users Mistakenly under ARPA Use Statistics

Sorry I couldn't get these to you at your meeting here. This is a list of all Utility users ascribed to ARPA during the last several weeks. I have already moved STALOG to ARPA-NSW. Should I move others as well?

ARPA-NSW Users Mistakenly under ARPA Use Statistics

1	*bad* ARPA-PRACTICE					1
2	*bad* VANDERBURGH					2
3	AFDAA-XO	3-MAY-75	.06	1.60	3.65%	3
4	ARPA-PM	3-MAY-75	.04	2.44	1.83%	4
5	BANGERT	3-MAY-75	.48	30.01	1.60%	5
6	BEARD	10-MAY-75	.00	.01	10.00%	6
7	BECKER	7-JUN-75	.00	.02	4.55%	7
8	BLUE	7-JUN-75	.00	.05	1.63%	8
9	CAMPBELL	17-MAY-75	.00	.02	3.45%	9
10	CARLSON	3-MAY-75	.06	2.80	2.16%	10
11	COLEMAN	3-MAY-75	.00	.26	1.93%	11
12	CROCKER	3-MAY-75	.05	2.67	2.01%	12
13	DCLEMENTS	3-MAY-75	.01	1.15	.65%	13
14	DONCHIN	3-MAY-75	.01	.10	5.28%	14
15	DORIS	5-APR-75	.00	.01	12.00%	15
16	DSDC-PR	3-MAY-75	.02	1.88	1.24%	16
17	DSDC-SC	3-MAY-75	.12	6.53	1.78%	17
18	DSDC-SG	7-JUN-75	.16	11.79	1.34%	18
19	DSDC-SYD	10-MAY-75	.00	.16	2.47%	19
20	DSDC-SYO	7-JUN-75	.00	.03	7.00%	20
21	DSDC-XF	3-MAY-75	.29	30.15	.95%	21
22	DUBOIS	7-JUN-75	.00	.35	.32%	22
23	EDWARDS	5-APR-75	.05	2.70	1.73%	23
24	GROSS	3-MAY-75	.00	.01	9.09%	24
25	HARRIS	3-MAY-75	.00	.41	.34%	25

ARPA-NSW Users Mistakenly under ARPA Use Statistics

26	IWSS	7-JUN-75	.00	.07	1.17%	26
27	JACKSON	3-MAY-75	.01	.08	6.79%	27
28	KAHN	3-MAY-75	.01	.34	3.79%	28
29	LICKLIDER	5-APR-75	.00	.00	13.33%	29
30	LUDWIG	3-MAY-75	.00	.03	4.72%	30
31	LYONS	7-JUN-75	.00	.03	2.46%	31
32	MACROS	7-JUN-75	.02	.45	4.10%	32
33	MCLINDON	3-MAY-75	.02	3.16	.52%	33
34	ORSINI	3-MAY-75	.00	.34	.24%	34
35	ROMNEY	19-APR-75	.00	.01	7.69%	35
36	RUSSELL	3-MAY-75	.16	9.47	1.70%	36
37	STALOG	3-MAY-75	.37	27.85	1.34%	37
38	STO	5-APR-75	.00	.02	4.48%	38
39	STUBBS	5-APR-75	.01	.80	.77%	39
40	WALKER	3-MAY-75	.02	2.44	.82%	40
41	WILLIS	3-MAY-75	.00	.01	4.76%	41
42	XGP	10-MAY-75	.01	.08	7.91%	42
43	YEE	3-MAY-75	.00	.35	.24%	43

RA3Y 17-JUN-75 17:37 32762

ARPA-NSW Users Mistakenly under ARPA Use Statistics

(J32762) 17-JUN-75 17:37;;; Title: Author(s): Raymond R.
Panko/RA3Y; Distribution: /LAC([ACTION]); Sub-Collections:
SRI-ARC; Clerk: RA3Y;