SERIES SUBSERIES SOX SOX FOLDER 7 SING ARCHIVES COLL 10: 1022

Index of /archive/1996/restore0103/archive

	Name	Last modified	Size	Description
٦	Parent Directory	19-Dec-1995 21:53	O Michigan Andrew Andrew Andrew Angele com Andrew Complex of Security Complex of Secur	
	1993/	09-Nov-1995 14:07	4000	
	1994/	05-Dec-1995 23:06	names:	
	1995/	15-Dec-1995 10:24	***	
*************				3000000 box satisfaces (3) 1000 box satisface

Apache/1.3.12 Server at www.slac.stanford.edu Port 80

Index of /archive/1996/restore0103/archive/1993

	Name	Last modified	Size	Description
			erminakan kengupan pengupanan	
	Parent Directory	09-Nov-1995 14:07	-	
2	news-bfac-decision	09-Nov-1995 14:07	17k	

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Index of /archive/1996/restore0103/archive/1994

	Name	Last modified	Size	Description
	The second secon			
	Parent Directory	09-Nov-1995 14:07	Madeson	
	log	23-Jun-1995 17:35	1 k	
	oldslac.html	17-Mar-1994 20:01	13k	
圁	wizards.html	07-Mar-1995 17:50	2k	
#HOLYONOD PRODUCTION AND				

Apache/1.3.12 Server at www.slac.stanford.edu Port 80

Index of /archive/1996/restore0103/archive/1995

	Name	Last modified	Size	Description
1	Parent Directory	09-Nov-1995 14:07		AMERICAN CONTROL OF THE PROPERTY OF THE PROPER
<u></u>		25-Oct-1994 20:55	7 k	
	SLACinst.html	07-Jul-1995 07:53	7 k	
	SLACinst/	19-Dec-1995 19:00	-	
	annals.html	22-Mar-1995 03:51	1k	
	comp/	31-Oct-1995 15:42	•	
	how-to-order/	23-Jun-1995 17:37		
ৰ	key-events.ps	12-Aug-1993 16:36	100k	
3	<u>logo.gif</u>	25-Oct-1994 20:55	7 k	
	news-bfac-decision	09-Nov-1995 14:07	17k	
	oldslac.html	17-Mar-1994 20:01	13k	
	ppar.memo	10-May-1995 20:40	3k	
圍	slac.html	10-Dec-1995 10:49	19k	
	slac.htmllog	10-May-1995 13:58	18k	
	template.html	10-Feb-1995 16:35	3 k	
	test-slac.html	10-Dec-1995 10:32	22k	
	todtw/	03-May-1995 10:20		
	www/	04-Dec-1995 13:37		
	wwwproto08/	17-Sep-1995 02:02		
	wwwprototemp/	17-Sep-1995 03:29	-	

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120/100 175/05/

RIES SUBSERIES FOLDER O

Index of /archive/1996/restore0103/bis

	Name	Last modified	Size	Description
9			PPRODER PRODER PROPERTY CONTRACTOR CONTRACTO	
~	Parent Directory	19-Dec-1995 21:53		
	procure/	12-Apr-1995 16:01	bidan	
necontribution const				

Apache/1.3.12 Server at www.slac.stanford.edu Port 80

Index of /archive/1996/restore0103/bis/procure

Name	Last modified	Size	Description
b		on-formietaliseptitikoppenionensistess	
Parent Directory	12-Apr-1995 16:00	sinde	
req/	12-Apr-1995 16:01	4000	
\$100×100×100×100×100×100×100×100×100×100			^

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Index of /archive/1996/restore0103/bis/procure/req

	Name	Last modified	Size	Description	
100			Tymenminnigit ja		
~	Parent Directory	12-Apr-1995 16:01	-		
	slaconly/	15-Nov-1995 11:28			

Apache/1.3.12 Server at www.slac.stanford.edu Port 80

Index of /archive/1996/restore0103/bis/procure/req/slaco

	Name	Last modified	<u>Size</u>	Description
-		defined a simple constraint of the constraint		
	Parent Directory	12-Apr-1995 16:01	***	
	eldreq-old.html	21-Jun-1995 11:00	1k	
	eldreq.html	15-Nov-1995 11:04	1k	
and contributed treet				

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ELDREQ database Searcher

Note that this page only works if your browser supports forms. Please enter as many of the following selection criteria as you wish.

Requisition:	nnnnna i.e 21459G
Originator:	last name
Group prefix:	pep, bbr, esh
Req dated after:	(mm/dd/yy)
Req dated before:	(mm/dd/yy)
Work order number:	nn-nnnn-n
Account number:	nn-nnnn
Suggested Vendor:	purdy
Item Description:	
Submit Clear	

Suggestion box George Crane SLAC 31 Jan 1995

100 Commence of the second second

SERIES SUBSERIES FOLDER

Index of /archive/1996/restore0103/comp

	Name	Last modified	d	Size	Description
ث	Parent Directory	19-Dec-1995 2	21:53	en e	
	CopyOftelecom/	26-Oct-1995 (09:35	_	
	cernlib/	25-Feb-1997 1	17:58		
	form/	19-May-1995 2	23:10		
	fortran/	28-Nov-1995 1	14:26	ince	
	future/	28-Apr-1995 1	15:02		
	how-to-order/	30-Aug-1995 2	20:55	-	
	intro/	11-Dec-1995 1	4:36	_	
	mac/	11-Dec-1995 1	6:20	éan	
	net/	02-Jan-1996 2	20:56		
	pc/	01-Nov-1995 1	0:24	-	
	physics/	15-Nov-1995 1	2:05	_	
	platform.html	22-Dec-1995 1	7:33	3k	
	security/	22-Nov-1995 1	5:30		
	slacwide/	10-Dec-1995 1		, man	
	telecom/	13-Dec-1995 1	9:42	wine	
	unix/	21-Nov-1995 1	0:32	_	
	vendor/	20-Dec-1995 1			
20-00 000 000 000 000 000 000 000 000 00					

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Telecommunications Home Page

SLAC 28 July 1995

The Telecommunications group provides support for telephones, voice mail, cellular phones, pocket pagers, and videoconferencing.

For More Information

- A list of whom to contact for Telecommunications needs
- SLAC Telephone Users' Guide, a complete guide to services, how to report problems, and various listings (e.g., department reference numbers, faxes, ATOMs list, conference rooms.**
- ATOMS, your liaison to Telecommunications, and who they are.*
- Information sheet for new cellular phone users
- A User's Guide to Video Teleconferencing at SLAC

Policies

We encourage SLAC personnel to be familiar with policies about tampering with telephone cables/equipment, service turnaround times, personal calls, international calling, monitoring for phone abuse.*

Telecommunications Services

- Telephones: placing service requests, classes of service, personal calls, conference calls, reporting problems.*
- Voice Mail: how to get it. classes.*
- Pocket Pagers: how to get one, how to page someone, reporting problems.*
- Cellular Telephones: how to purchase one,* new user information, reporting problems.
- Video Teleconferencing: making reservations, sites you can conference with, tips and hints.

Information for ATOMs

Telecommunications has developed software for ATOMs to submit telephone related requests. Find out how new ATOMs can get started, place phone orders, and help speed order processing.*

Emergency Communications

Emergency communications systems provides a means of notifying proper authorities that an emergency exists, alerts emergency response personnel, and provides tactical communication between various units responding to the emergency. The communication system includes telephone, paging, radio, alarm, data systems, and runners.

Here are procedures for using and testing communications equipment used by SLAC's emergency organization. Future items will discuss planning for emergency communications in your department or building and tips for all SLAC personnel who need to communicate in emergency situations.

- Cellular phones: testing.
- Radio test: radio test script, log for recording results from radio tests.

Press here to go to the SLAC Home Page.

Ilse; Brenda

^{*} From the SLAC Telephone Users' Guide.

^{**} PostScript versions of individual chapters and the entire guide are in /usr/local/doc/how-to-use/phone-users-guide on UNIX; on VM see file phonegui readme * for printing directions.

	Name	Last modified	<u>Size</u>	Description
	Parent Directory	28-Aug-2001 14:54		
	cernlib.html	25-Feb-1997 17:57	1k	
	ocerndoc/	04-Feb-1997 14:18	No.	
	ocernlib.html	04-Feb-1997 14:19	3k	
	oslacdoc/	04-Feb-1997 14:19	_	
mykramina ar				

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úmichonnicia	Name	Last modifi	ed	Size	Description
*	Parent Directory	25-Feb-1997	17:58	n dan	
	00README	04-Feb-1997	14:17	1k	
	CERN.directory.listing	04-Feb-1997	14:18	3k	
	ariadne.ps.gz	04-Feb-1997	14:17	87k	
	cnasdoc.faq	04-Feb-1997	14:18	10k	
Ď		04-Feb-1997	14:18	314k	
Ü	f90.ps.gz	04-Feb-1997	14:17	37k	
	ffread.ps.gz	04-Feb-1997	14:17	20k	
	geant321.html	04-Feb-1997	14:17	1k	
Ö	geant321/	04-Feb-1997	14:18	*****	
Ď	hbook.ps.gz	04-Feb-1997	14:17	378k	
Ď	hepdb.ps.gz	04-Feb-1997	14:18	160k	
	higz.ps.gz	04-Feb-1997	14:17	2.0M	
Ö	install.ps.gz	04-Feb-1997	14:17	141k	
Ū,	jetset74.ps.gz	04-Feb-1997	14:17	776k	
Ü	kuip.ps.gz	04-Feb-1997	14:17	727k	
Ď	leamax.ps.gz	04-Feb-1997	14:17	35k	
Ď	minuit.ps.gz	04-Feb-1997	14:17	101k	
Ďı	patchy5.ps.gz	04-Feb-1997	14:17	51k	
Ď	paw++.ps.gz	04-Feb-1997	14:17	723k	
	paw.ps.gz	04-Feb-1997	14:18	2.4M	
D	pawnpict.ps.gz	04-Feb-1997	14:18	1.1M	
Ñ	pawplusplus.ps.gz	04-Feb-1997	14:17	723k	
Ď.	pdflib.ps.gz	04-Feb-1997	14:17	266k.	
Ü	pythia57.ps.gz	04-Feb-1997	14:18	776k	
	shortwrups/	04-Feb-1997	14:19	_	
Ü	zebra.ps.gz	04-Feb-1997	14:17	428k	

Apache/1.3.12 Server at www.slac.stanford.edu Port 80

The following is a README file from CERN. You can reach the directory via ftp to asisftp.cern.ch (do this from Jupiter) and go to directory cernlib/doc/ps.dir

We also copy several of the larger and more popular files to slac in /usr/local/doc/CERN and we try to keep them up to date.

This directory contains compressed PostScript files for most of the manuals produced by the Applications Software and Databases Group of CN Division.

Michel Goossens / CN

```
ariadne.ps.qz
bournint.ps.gz
cmz.ps.qz
cmzguide.ps.qz
comis.ps.gz
cspack.ps.qz
d5011.ps.gz
epio.ps.gz
f90.ps.gz
fatmen.ps.gz
ffread.ps.gz
garfield.ps.gz
geant
                     directory with geant files
hbook.ps.gz
hepdb.ps.gz
higz.ps.gz
install.ps.gz
jetnet 30_manual.ps.gz
jetset74.ps.gz
                    same as pythia57.ps.qz
kuip.ps.gz
mad
                     directory with MAD files
minuit.ps.gz
naglib.ps.gz
patchy5.ps.gz
paw++.ps.gz
paw.ps.gz
                     PAW manual with all pictures (difficult to print!)
pawnpict.ps.gz
                    PAW manual without pictures
pdflib.ps.gz
pythia57.ps.gz
shortwrups.dir
                     directory with CERNLIB short writeups
tex at cern.dir
vaxtap.ps.qz
zebra.ps.gz
```

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total 31668
 -rwxrwxr-x 1 218
                      1325
                                   850 Dec 8 1994 00README
 -r--r-- 1 218
                      1325
                                88637 Oct 12
                                             1994 ariadne.ps.gz
 -rwxrwxr-x 1 218
                      1325
                                 35456 Sep 2
                                              1992 bournint.ps.gz
 -rw-r--r-- 1 218
                      wheel
                                232905 Jun 13
                                             1994 cmz.ps.gz
-rw-r--r- 1 218
                      wheel
                               27787 Jun 13
                                             1994 cmzguide.ps.gz
-rw-r--r-- 1 218
                                36723 Jun 30
                       1325
                                             1993 comis.ps.gz
-rw-r--r-- 1 cernlib cp
                                84831 Jun 8 10:37 cspack.ps.gz
-rw-r--r-- 1 102
                     ср
                                 85850 Jun 8 10:37 cspack2.ps.gz
-rwxrwxr-x 1 218
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                                 35957 Apr 8
                                             1993 d5011.ps.qz
-rw-r--r-- 1 218
                      1325
                                 54469 Aug 19 1994 epio.ps.qz
-rw-r--r-- 1 218
                      wheel
                                38158 Jun 7
                                             1994 f90.ps.gz
-rw-r--r 1 cernlib cp
                              288729 Jun 7
                                             1994 fatmen.ps.gz
-rw-r--r-- 1 218 wheel
                               20254 Jun 15
                                             1994 ffread.ps.qz
-rw-r--r-- 1 218
                      wheel
                               829212 Jun 20
                                             1994 garfield.ps.qz
drwxrwxr-x 2 rtb
                     wheel
                                 2048 Dec 7
                                             1994 geant
-rw-r--r-- 1 218
                     1325
                               387364 Feb 7 1995 hbook.ps.gz
-rw-r--- 1 218
                      1325
                               2140183 Apr 27 14:08 hbookpdf.pdf
-rw-r--r-- 1 cernlib cp
                                             1995 hepdb.ps.gz
                              164032 Mar 23
          1 102 cp
-rw-r--r--
                               165370 Mar 23
                                             1995 hepdb2.ps.qz
-rw-r--r-- 1 218
                      1325
                               2115288 Jun 15 08:45 higz.ps.gz
-rw-r--r-- 1 cernlib cp
                              144449 Nov 30 1994 install.ps.gz
-rw-r--r-- 1 218
                     1325
                                97224 Jun 30 1994 jetnet 30 manual.ps.gz
lrwxr-xr-x 1 102
                                   14 Aug 29 1994 jetset 74.ps.gz -> pythia 57.ps.
                      wheel
          1 218
-rw-r--r--
                               744345 Oct 5 1994 kuip.ps.gz
                      1325
drwxr-xr-x 2 cernlib software
                                2048 Mar 11
                                             1994 mad
-rw-r--r-- 1 218
                      wheel
                              103608 May 11
                                             1994 minuit.ps.gz
                               269098 Jan 8 1993 naglib.ps.gz
-rwxrwxr-x 1 218
                      1325
          1 218
-rw-r--r--
                     1325
                               123990 Jul 11 17:12 p5refman.ps.gz
-rw-r--r--
          1 218
                     1325
                               51829 Oct 12 1994 p5release.ps.gz
          1 218
-rw-r--r--
                      1325
                               740518 Jul 10 07:34 paw++.ps.gz
-rw-r--r--
          1 218
                    1325
                              2496976 Feb 13
                                             1995 paw.ps.gz
           1 218
-rw-r--r--
                    1325
                              1118090 Dec 8
                                            1994 pawnpict.ps.gz
          1 218
                               272209 Jul 7 07:06 pdflib.ps.gz
-rw-rw-r--
                    1325
-rw-r--r--
          1 102
                               794521 Aug 29 1994 pythia57.ps.gz
                    ср
drwxrwxr-x 2 rtb
                      wheel
                               20480 Jun 14 06:49 shortwrups.dir
          2 rtb
drwxrwxr-x
                      wheel
                                 2048 Jun 20 1994 tex_at_cern.dir
                     wheel 2048 Jun 20 1994 tex_at_cern 1325 1861828 Jul 12 14:01 texacern.ps
          1 218
-rw-rw-r--
          1 cernlib cp
-rw-r--r--
                               81476 Jun 7
                                             1994 vaxtap.ps.gz
-rw-r--r-- 1 218 1325
                             438132 Feb 17 1995 zebra.ps.gz
```

	Name	Last modified	Size	Description
*	Parent Directory	04-Feb-1997 14:18		
	aaaa.ps.gz	04-Feb-1997 14:18	26k	
	base.ps.gz	04-Feb-1997 14:18	64 k	
Ď	cons.ps.gz	04-Feb-1997 14:18	57k	
	draw.ps.gz	04-Feb-1997 14:18	547k	
	eps/	04-Feb-1997 14:18	minim	
	geom.ps.gz	04-Feb-1997 14:18	497k	
	hits.ps.gz	04-Feb-1997 14:18	41k	
	iopa.ps.gz	04-Feb-1997 14:18	20k	
	kine.ps.gz	04-Feb-1997 14:18	24k	
	phys.ps.gz	04-Feb-1997 14:18	320k	
O	trak.ps.gz	04-Feb-1997 14:18	41k	
0	xint.ps.gz	04-Feb-1997 14:18	223k	
		04-Feb-1997 14:18	52k	

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4	Parent Directory	04-Feb-1997 14:18	inain	
4		04-Feb-1997 14:18	10k	
4		04-Feb-1997 14:18	6k	
4	base110-1.eps	04-Feb-1997 14:18	7 k	
ব	base200-1.eps	04-Feb-1997 14:18	7 k	
4	base200-2.eps	04-Feb-1997 14:18	7 k	
4	cnastit.eps	04-Feb-1997 14:18	1k	
ক ক ক ক	draw110-1.eps	04-Feb-1997 14:18	47k	
		04-Feb-1997 14:18	356k	
4	draw115-2.eps	04-Feb-1997 14:18	538k	
ৰ		04-Feb-1997 14:18	26k	
A	draw510-1.eps	04-Feb-1997 14:18	99k	
A	draw510-2.eps	04-Feb-1997 14:18	102k	
A	dummy.eps	04-Feb-1997 14:18	5 k	
ৰ	geom001-1.eps	04-Feb-1997 14:18	13k	
4	geom001-2.eps	04-Feb-1997 14:18	19k	
4	geom050-1.eps	04-Feb-1997 14:18	173k	
ৰ	geom050-2.eps	04-Feb-1997 14:18	517k	
4	geom050-3.eps	04-Feb-1997 14:18	958k	
4	geom050-4.eps	04-Feb-1997 14:18	11k	
4	geom130-1.eps	04-Feb-1997 14:18	5 k	
4	geom130-2.eps	04-Feb-1997 14:18	5 k	
4	geom130-3.eps	04-Feb-1997 14:18	5k	
কি কি কি	geom130-4.eps	04-Feb-1997 14:18	5 k	
4	geom199-1.eps	04-Feb-1997 14:18	23k	
	phys332-1.eps	04-Feb-1997 14:18	17k	
ৰ	phys332-2.eps	04-Feb-1997 14:18	22k	

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*********	Name	Last modified	Size	Description
.	Parent Directory	04-Feb-1997 14:18	interview in the little state of the control of the	
Ď		04-Feb-1997 14:18	7 k	
		04-Feb-1997 14:18	8 k	
Ö		04-Feb-1997 14:18	7 k	
Q		04-Feb-1997 14:18	7 k	
		04-Feb-1997 14:18	9 k	
	b300.ps.gz	04-Feb-1997 14:18	10k	
	c200.ps.gz	04-Feb-1997 14:18	10k	
	c201.ps.gz	04-Feb-1997 14:18	11k	
D	c202.ps.gz	04-Feb-1997 14:18	11k	
	c205.ps.gz	04-Feb-1997 14:18	9k	
	c207.ps.gz	04-Feb-1997 14:18	8 k	
	c208.ps.gz	04-Feb-1997 14:18	8 k	
	c209.ps.gz	04-Feb-1997 14:18	9k	
	c210.ps.gz	04-Feb-1997 14:18	8 k	
	c300.ps.gz	04-Feb-1997 14:18	8 k	
	<u>c301.ps.gz</u>	04-Feb-1997 14:18	9k	
	<u>c302.ps.gz</u>	04-Feb-1997 14:18	9k	
	<u>c303.ps.gz</u>	04-Feb-1997 14:18	9k	
	<u>c304.ps.gz</u>	04-Feb-1997 14:18	9k	
	<u>c305.ps.gz</u>	04-Feb-1997 14:18	9k	
	c306.ps.gz	04-Feb-1997 14:18	9k	
	c307.ps.gz	04-Feb-1997 14:18	8 k	
	c309.ps.gz	04-Feb-1997 14:18	15k	
	c310.ps.gz	04-Feb-1997 14:18	6k	
	c312.ps.gz	04-Feb-1997 14:18	8 k	
.19.	c313.ps.gz	04-Feb-1997 14:18	9 k	
	c315.ps.gz	04-Feb-1997 14:18	9k	
	c316.ps.gz	04-Feb-1997 14:18	9 k	
	c318.ps.gz	04-Feb-1997 14:18	11k	

n	_		
<u>.</u> [6	<u>c320.ps.gz</u>	04-Feb-1997 14:18	11k
		04-Feb-1997 14:18	10k
		04-Feb-1997 14:18	8 k
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		04-Feb-1997 14:18	8 k
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	0027.98.92	04-Feb-1997 14:18	9 k
		04-Feb-1997 14:18	10k
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Ō		04-Feb-1997 14:18	10k
Ď		04-Feb-1997 14:18	8 k
Ō		04-Feb-1997 14:19	10k
Ō		04-Feb-1997 14:19	8 k
Ō		04-Feb-1997 14:19	9k
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		04-Feb-1997 14:19	9k
		04-Feb-1997 14:19	8 k
		04-Feb-1997 14:19	9 k
		04-Feb-1997 14:19	10k
Ď	c342.ps.gz	04-Feb-1997 14:19	8 k
Û	c343.ps.gz	04-Feb-1997 14:19	10k
Ü	c344.ps.gz	04-Feb-1997 14:19	10k
Ď	c345.ps.gz	04-Feb-1997 14:19	10k
Ď	c346.ps.gz	04-Feb-1997 14:19	14k
	c347.ps.gz	04-Feb-1997 14:19	17k
	c348.ps.gz	04-Feb-1997 14:19	10k
	c349.ps.gz	04-Feb-1997 14:19	13k
	comis.ps.gz	04-Feb-1997 14:19	36k
	d101.ps.gz	04-Feb-1997 14:19	8 k
	d102.ps.gz	04-Feb-1997 14:19	9k
	d103.ps.gz	04-Feb-1997 14:19	12k
	d104.ps.gz	04-Feb-1997 14:19	9k
	d105.ps.gz	04-Feb-1997 14:19	10k
	d106.ps.gz	04-Feb-1997 14:19	8 k
U	d107.ps.gz	04-Feb-1997 14:19	10k

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		04-Feb-1997 14:19	9 k
		04-Feb-1997 14:19	5 k
		04-Feb-1997 14:19	10k
	d201.ps.gz	04-Feb-1997 14:19	11k
	d202.ps.gz	04-Feb-1997 14:19	11k
	d203.ps.gz	04-Feb-1997 14:19	11k
		04-Feb-1997 14:19	6k
		04-Feb-1997 14:19	10k
	d401.ps.gz	04-Feb-1997 14:19	10k
		04-Feb-1997 14:19	19k
O		04-Feb-1997 14:19	10k
Ö		04-Feb-1997 14:19	7 k
		04-Feb-1997 14:19	10k
Ď	d601.ps.gz	04-Feb-1997 14:19	13k
		04-Feb-1997 14:19	12k
	d701.ps.gz	04-Feb-1997 14:19	4 k
Ü	d702.ps.gz	04-Feb-1997 14:19	8 k
Ų.	d703.ps.gz	04-Feb-1997 14:19	11k
	d704.ps.gz	04-Feb-1997 14:19	10k
	e100.ps.gz	04-Feb-1997 14:19	8 k
	e102.ps.gz	04-Feb-1997 14:19	7 k
	e103.ps.gz	04-Feb-1997 14:19	7 k
	e104.ps.gz	04-Feb-1997 14:19	13k
	e105.ps.gz	04-Feb-1997 14:19	9k
	e106.ps.gz	04-Feb-1997 14:19	8 k
	e201.ps.gz	04-Feb-1997 14:19	11k
	e207.ps.gz	04-Feb-1997 14:19	7 k
	e208.ps.gz	04-Feb-1997 14:19	10k
	e210.ps.gz	04-Feb-1997 14:19	27k
	e211.ps.gz	04-Feb-1997 14:19	12k
	e221.ps.gz	04-Feb-1997 14:19	8 k
	e222.ps.gz	04-Feb-1997 14:19	11k

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	e230.ps.gz	04-Feb-1997 14:19	15k
	0000.00.00	04-Feb-1997 14:19	7 k
	e255.ps.gz	04-Feb-1997 14:19	8 k
	e406.ps.gz	04-Feb-1997 14:19	11k
		04-Feb-1997 14:19	9k
		04-Feb-1997 14:19	9 k
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		04-Feb-1997 14:19	11k
		04-Feb-1997 14:19	8 k
	f110.ps.gz	04-Feb-1997 14:19	10k
	f112.ps.gz	04-Feb-1997 14:19	10k
	f116.ps.gz	04-Feb-1997 14:19	7 k
	f117.ps.gz	04-Feb-1997 14:19	7 k
	f118.ps.gz	04-Feb-1997 14:19	7 k
	f121.ps.gz	04-Feb-1997 14:19	11k
	f122.ps.gz	04-Feb-1997 14:19	8 k
	f123.ps.gz	04-Feb-1997 14:19	11k
	f150.ps.gz	04-Feb-1997 14:19	10k
	f230.ps.gz	04-Feb-1997 14:19	5 k
	f406.ps.gz	04-Feb-1997 14:19	11k
	f500.ps.gz	04-Feb-1997 14:19	11k
	g100.ps.gz	04-Feb-1997 14:19	9k
	g101.ps.gz	04-Feb-1997 14:19	9k
	g102.ps.gz	04-Feb-1997 14:19	9k
	g103.ps.gz	04-Feb-1997 14:19	8 k
	g104.ps.gz	04-Feb-1997 14:19	9k
	g105.ps.gz	04-Feb-1997 14:19	9k
	g106.ps.gz	04-Feb-1997 14:19	9k
	g110.ps.gz	04-Feb-1997 14:19	9k

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™.	<u>g115.ps.gz</u>	04-Feb-1997 14:19	13k
J.	gl16.ps.gz	04-Feb-1997 14:19	13k
	- and	04-Feb-1997 14:19	8 k
	• 9501.65.47	04-Feb-1997 14:19	8 k
		04-Feb-1997 14:19	12k
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		04-Feb-1997 14:19	7 k
		04-Feb-1997 14:19	9 k
	m103.ps.gz	04-Feb-1997 14:19	6 k
	m104.ps.gz	04-Feb-1997 14:19	8 k
	m107.ps.gz	04-Feb-1997 14:19	7 k
	m108.ps.gz	04-Feb-1997 14:19	5k
	m109.ps.gz	04-Feb-1997 14:19	7 k
	m214.ps.gz	04-Feb-1997 14:19	11k
	m215.ps.gz	04-Feb-1997 14:19	8 k
	m216.ps.gz	04-Feb-1997 14:19	15k
	m218.ps.gz	04-Feb-1997 14:19	10k
	m220.ps.gz	04-Feb-1997 14:19	8 k
	m224.ps.gz	04-Feb-1997 14:19	6k
	m231.ps.gz	04-Feb-1997 14:19	8 k
	m232.ps.gz	04-Feb-1997 14:19	10k
	m233.ps.gz	04-Feb-1997 14:19	8 k
	m400.ps.gz	04-Feb-1997 14:19	9 k
	m409.ps.gz	04-Feb-1997 14:19	11k

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	m410.ps.gz	04-Feb-1997 14:19	8 k
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		04-Feb-1997 14:19	8 k
		04-Feb-1997 14:19	7 k
		04-Feb-1997 14:19	7 k
		04-Feb-1997 14:19	9 k
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		04-Feb-1997 14:19	6k
		04-Feb-1997 14:19	7 k
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		04-Feb-1997 14:19	9k
		04-Feb-1997 14:19	7 k
		04-Feb-1997 14:19	8 k
		04-Feb-1997 14:19	6k
		04-Feb-1997 14:19	7 k
		04-Feb-1997 14:19	8 k
	m441.ps.gz	04-Feb-1997 14:19	8 k
		04-Feb-1997 14:19	9k
		04-Feb-1997 14:19	6k
	m502.ps.gz	04-Feb-1997 14:19	7 k
	m503.ps.gz	04-Feb-1997 14:19	7 k
	m507.ps.gz	04-Feb-1997 14:19	7 k
	m508.ps.gz	04-Feb-1997 14:19	8 k
	n001.ps.gz	04-Feb-1997 14:19	9k
	n002.ps.gz	04-Feb-1997 14:19	8 k
	n100.ps.gz	04-Feb-1997 14:19	7 k
	n103.ps.gz	04-Feb-1997 14:19	6k
	n105.ps.gz	04-Feb-1997 14:19	7 k
	n203.ps.gz	04-Feb-1997 14:19	7 k
	q100.ps.gz	04-Feb-1997 14:19	7 k
	q120.ps.gz	04-Feb-1997 14:19	6k
	q121.ps.gz	04-Feb-1997 14:19	6k
	q122.ps.gz	04-Feb-1997 14:19	6k
	q123.ps.gz	04-Feb-1997 14:19	6k
	q124.ps.gz	04-Feb-1997 14:19	6k

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	<u>q180.ps.gz</u>	04-Feb-1997 14:19	6k
	1	04-Feb-1997 14:19	6k
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		04-Feb-1997 14:19	10k
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		04-Feb-1997 14:19	9k
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	ulll.ps.gz	04-Feb-1997 14:19	13k
	ull2.ps.gz	04-Feb-1997 14:19	11k
	u501.ps.gz	04-Feb-1997 14:19	10k
	v100.ps.gz	04-Feb-1997 14:19	8 k
	v101.ps.gz	04-Feb-1997 14:19	7 k
	v102.ps.gz	04-Feb-1997 14:19	9k
	v103.ps.gz	04-Feb-1997 14:19	8 k
Ď	v104.ps.gz	04-Feb-1997 14:19	10k
	<u>v105.ps.gz</u>	04-Feb-1997 14:19	8 k
	v106.ps.gz	04-Feb-1997 14:19	8 k
	v107.ps.gz	04-Feb-1997 14:19	8 k
	v108.ps.gz	04-Feb-1997 14:19	9k
	v109.ps.gz	04-Feb-1997 14:19	8 k
	v110.ps.gz	04-Feb-1997 14:19	8 k
	v111.ps.gz	04-Feb-1997 14:19	9 k
	v112.ps.gz	04-Feb-1997 14:19	9k
	v113.ps.gz	04-Feb-1997 14:19	11k
	v114.ps.gz	04-Feb-1997 14:19	10k
	<u>v115.ps.gz</u>	04-Feb-1997 14:19	10k
	v116.ps.gz	04-Feb-1997 14:19	7 k
Ō	v120.ps.gz	04-Feb-1997 14:19	8 k
	v122.ps.gz	04-Feb-1997 14:19	7 k
U	v130.ps.gz	04-Feb-1997 14:19	6k

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Ų.	v135.ps.gz	04-Feb-1997 14:19	9k
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Q.		04-Feb-1997 14:19	9 k
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D		04-Feb-1997 14:19	7 k
	v304.ps.gz	04-Feb-1997 14:19	7 k
	v306.ps.gz	04-Feb-1997 14:19	7 k
	v401.ps.gz	04-Feb-1997 14:19	7 k
	v700.ps.gz	04-Feb-1997 14:19	10k
	w150.ps.gz	04-Feb-1997 14:19	7 k
	w151.ps.gz	04-Feb-1997 14:19	7 k
	w505.ps.gz	04-Feb-1997 14:19	7 k
	w515.ps.gz	04-Feb-1997 14:19	8 k
	y201.ps.gz	04-Feb-1997 14:19	8 k
	y250.ps.gz	04-Feb-1997 14:19	6k
	y251.ps.gz	04-Feb-1997 14:19	6k
	z001.ps.gz	04-Feb-1997 14:19	7 k
	z007.ps.gz	04-Feb-1997 14:19	9k
	z008.ps.gz	04-Feb-1997 14:19	8 k
	z009.ps.gz	04-Feb-1997 14:19	11k
	z020.ps.gz	04-Feb-1997 14:19	7 k
	z034.ps.gz	04-Feb-1997 14:19	7 k
	z035.ps.gz	04-Feb-1997 14:19	7 k
	z036.ps.gz	04-Feb-1997 14:19	8 k
	z037.ps.gz	04-Feb-1997 14:19	8 k
	z041.ps.gz	04-Feb-1997 14:19	7 k
	z042.ps.gz	04-Feb-1997 14:19	8 k
	z044.ps.gz	04-Feb-1997 14:19	бk
	z045.ps.gz	04-Feb-1997 14:19	6k
	z100.ps.gz	04-Feb-1997 14:19	7 k

z203.ps.gz	04-Feb-1997 14:19	8 k
z204.ps.gz	04-Feb-1997 14:19	7 k
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z264.ps.gz	04-Feb-1997 14:19	8 k
z265.ps.gz	04-Feb-1997 14:19	13k
z266.ps.gz	04-Feb-1997 14:19	8 k
z267.ps.gz	04-Feb-1997 14:19	9 k
z300.ps.gz	04-Feb-1997 14:19	7 k
z301.ps.gz	04-Feb-1997 14:19	9 k
z303.ps.gz	04-Feb-1997 14:19	7 k
z304.ps.gz	04-Feb-1997 14:19	9k
z305.ps.gz	04-Feb-1997 14:19	13k
z306.ps.gz	04-Feb-1997 14:19	7 k
z307.ps.gz	04-Feb-1997 14:19	8 k
z308.ps.gz	04-Feb-1997 14:19	12k
z309.ps.gz	04-Feb-1997 14:19	7 k
z310.ps.gz	04-Feb-1997 14:19	11k
z311.ps.gz	04-Feb-1997 14:19	10k
z312.ps.gz	04-Feb-1997 14:19	7 k
z313.ps.gz	04-Feb-1997 14:19	8 k
	z204.ps.gz z262.ps.gz z264.ps.gz z265.ps.gz z266.ps.gz z266.ps.gz z300.ps.gz z300.ps.gz z301.ps.gz z304.ps.gz z305.ps.gz z306.ps.gz z307.ps.gz z309.ps.gz z310.ps.gz z311.ps.gz z312.ps.gz	z204.ps.gz 04-Feb-1997 14:19 z262.ps.gz 04-Feb-1997 14:19 z264.ps.gz 04-Feb-1997 14:19 z265.ps.gz 04-Feb-1997 14:19 z266.ps.gz 04-Feb-1997 14:19 z267.ps.gz 04-Feb-1997 14:19 z300.ps.gz 04-Feb-1997 14:19 z301.ps.gz 04-Feb-1997 14:19 z303.ps.gz 04-Feb-1997 14:19 z304.ps.gz 04-Feb-1997 14:19 z305.ps.gz 04-Feb-1997 14:19 z307.ps.gz 04-Feb-1997 14:19 z309.ps.gz 04-Feb-1997 14:19 z309.ps.gz 04-Feb-1997 14:19 z310.ps.gz 04-Feb-1997 14:19 z311.ps.gz 04-Feb-1997 14:19 z312.ps.gz 04-Feb-1997 14:19

Apache/1.3.12 Server at www.slac.stanford.edu Port 80

Guide to CERNLIB Documents and Usage at SLAC

- Links to documents available from CERN
 - **Output** Writeups at CERN
 - o CERN CN/ASD group documentation server
 - o CERNLIB Short Writeups
- . Links to documents available locally
 - $_{\circ}$ Guide to using CERN CN/ASD software at SLAC:

File name	Description	Author
CERNLIB.readme	Overview of CERNLIB at SLAC	Charlie Martin
minuit-at-SLAC.ps	Using MINUIT on SLAC's unix cluster	Bill Lockman
minuit.example	Complete MINUIT example	Bill Lockman

- o /usr/local/cernlib/doc
- $_{\circ}$ Brief description of CERN CN/ASD documentation available locally:

File name	Description	CERN file date
directory	CERNLIB short writeups	Feb 28, 1995
ariadne.ps.gz	QCD color-dipole cascade model	Oct 12, 1994
comis.ps.gz	FORTRAN interpreter	Jun 30, 1993
f90.ps.gz	FORTRAN 90 tutorial.	Jun 07, 1994
ffread.ps.gz	Format-free input processing	Jun 15, 1994
geant321.html	GEANT 3.21 index	
hbook.ps.gz	HBOOK user's guide	Aug 22, 1994
hepdb.ps.gz	HEPDB reference guide	Mar 23, 1995
higz.ps.gz	HIGZ and HPLOT user's guide	Nov 25, 1994

jetset74.ps.gz	JETSET74/PYTHIA57 user's guide	Aug	29,	1994
leamax.ps.gz	Constrained fit package	Apr	08,	1993
minuit.ps.gz	MINUIT user's guide	Мау	11,	1994
patchy5.ps.gz	PATCHY conversion/update	0ct	12,	1994
paw++.ps.gz	PAW++ user's guide	Sep	23,	1994
paw.ps	PAW user's guide	Feb	13,	1995
pawnpict.ps.gz	PAW introductory tutorial	Dec	08,	1994
pdflib.ps.gz	Parton density functions	Nov	14,	1994
zebra.ps.gz	ZEBRA user's guide	Мау	31,	1994

Bill Lockman

Page Last Updated: 03 Jan 1997

	Name	Last modified	Size	Description
	Parent Directory CERNLIB.readme CERNLIB.readme.html cernlib_at_slac.html minuit-at-SLAC.ps minuit.example	25-Feb-1997 17:58 04-Feb-1997 14:19 04-Feb-1997 14:19 04-Feb-1997 14:19 04-Feb-1997 14:19 04-Feb-1997 14:19	- 8k 6k 6k 39k 5k	Description

Apache/1.3.12 Server at www.slac.stanford.edu Port 80

CERN software at SLAC

SLAC 8 November, 1995

Some preliminaries

Unix

We make the CERN library available on both the Sun and the RS6000. New versions are installed when CERN makes the tar files publicly available. The environment variable 'CERN' should be set to /usr/local/cernlib/\$ARCHNAME. This memo assumes that this variable is set. Another useful environment variable is CERN_LEVEL which you would generally set to 'new', pro', or 'old' to indicate which release of the CERN software you wish to use. The cernlib command is useful for determining which libraries are necessary to link your program. There is a man page.

VMS

If you will be using CERN software on SLACVX, put the command @CERN_HOME:CERN_LOGIN in your LOGIN.COM file. This will initialize logical variables (like CERN\$LIB). The VMS version of CERN software is not recommended as it is frozen at SLAC and is incomplete. Currently, the only working version of Paw on SLACVX is pawX11_m in the 'new' area.

VM

The CERN software on VM is not recommended and it is frozen at the levels listed below.

Current levels of the CERN libraries

	special	new	pro	old
Unix:	94a*	95a**	94b	94a
SLACVX:		93d	93b	CNL201
IBM/VM:		94a*	93b	CNL201

^{*} Backlevels of Geant, Jetset and Isajet are on the VM 'special' disk.

Directories (disks on VM) for each level of maintainence are listed below:

		Libraries		
	special	new	pro	old
Unix: SLACVX: IBM/VM:	GIME CERN94A	\$CERN/new/lib CERN\$NEW GIME NEWY	\$CERN/pro/lib CERN\$LIB on U/T disk	\$CERN/old/lib CERN\$OLD GIME CERNOLD
		Executables		
		new	pro	old
Unix:		\$CERN/new/bin	\$CERN/pro/bin	\$CERN/old/bin

^{**} On Sun systems, this version requires f77 at level 3.0.1.

SLACVX: IBM/VM:

CERN\$NEWEXE CERN\$CERNEXE CERN\$OLDEXE n/a n/a

n/a

NOTE: Software put in the old areas may only be kept for a short time.

Libraries and executables

Libraries

On Unix libraries have file extension of 'a' and are prefixed with 'lib' (e.g. libpacklib.a). On SLACVX libraries have a file extension of 'olb' (e.g. packlib.olb). Libraries on VM have a filetype of txtlib (e.g. packlib txtlib).

Executables

A complete set of the CERN executables is available on Unix and SLACVX (93d only). Most of these have not been tested at SLAC.

Documentation and Help

There are several User's guides (in postscript form) kept at SLAC, for example Geant, Minuit, Higz and Paw. Printing these documents is generally ill advised due to their large size. Hard copies of these documents are available at the service desk. If you must print a CERN produced document, print the first few pages to see how it fits on the page (hint: man psrev). You may want to scale it to fit better on U.S. size paper. There is a Unix shell script to do this. It is called scaleps.sh and is in the bin directory with all the other CERN executables. It doesn't always do a great job.

For SLAC online documentation click below:

Guide to CERNLIB Documents and Usage at SLAC

CERNLIB structure and contents

Short Writeups of CERNLIB (from CERN)

Calling the CERN library from C (by Michael Dahlinger at GSI computing, Darmstadt).

FTPing files from CERN

CERN has an anonymous FTP service through which you can download CERN documentation, newsletters, software etc. Some of the important directories are prohibited unless you ftp from the "registered" SLAC computer (JUPITER). An example session follows:

```
ftp asisftp.cern.ch
Name (asisftp:goossens): anonymous
Password: username@usernode.domain.country {prefix username with a '-' for speed}
ftp> binary
ftp> cd cernlib/doc/ps.dir
ftp> get zebra.ps.qz
```

ftp> quit

Please observe the restrictions documented in the copyright notice as explained in the 'login' notice that you will see.

Other sources of information

PAW page (from CERN)

CERNLIB release schedule (from CERN)

Source

Source for Geant is kept locally in a form that requires processing by **patchy** or **cmz**, programs used by CERN to distribute/prepare source for compilation on various platforms. These tools are installed for the rs6000 and are located in the /usr/local/cernlib/rs6000 directory. A VAX version of cmz is available as well. For information on the CERN installation procedures and major component descriptions click below:

CERN Program Library Installation Guide (118 pages, postscript)

At SLAC, GEANT source is contained in the following directories:

/usr/local/cernlib/share/{version}/src/car contains the source for Geant. /usr/local/cernlib/share/{version}/include contains include & header files for several packages.

{version} in the above directories is pro or new.

Charlie Martin -- X2260 -- cwm@slac.stanford.edu
After April 1, 1996, contact Willy Langeveld, X2280 - wglp09@slac.stanford.edu

```
-----Main program :
      PROGRAM MYPROG
      Implicit none
      integer SYSIN/1/,SYSRD/5/,SYSWR/6/,syspu/7/
      external myfcn, futil
      initialize unit numbers
      call mintio(SYSRD, SYSWR, SYSPU)
      open(unit=SYSRD, file='MYPROG.MINCARDS', status='OLD')
      open(unit=SYSWR, file='MYPROG.LISTING', status='UNKNOWN')
      open(unit=SYSPU, file='MYPROG.RESULTS', status='UNKNOWN')
      invoke minuit
      Call minuit (myfcn, futil)
      end
      subroutine futil
      end
-----MYFCN routine :
      Subroutine MYFCN(npar,g,f,x,iflag,futil)
      implicit none
     integer npar, iflag, i, ndat
     integer SYSIN/1/,SYSRD/5/,SYSWR/6/,syspu/7/
     parameter (ndat=5)
     real*8 f,g(*),x(*),xdat(ndat),ydat(ndat),edat(ndat),func,
           answer/15.7/, rms, avg, diff
     external futil
     if (iflag.eq.1) then
     initialization mode
        do i=1, ndat
           xdat(i)=i
            ydat(i) = answer+i-float(ndat+1)/2.
           edat(i)=1.
        end do
     end if
     compute LSQ
     f=0
     do i=1, ndat
        f=f+(ydat(i)-func(xdat(i),x(1)))**2/edat(i)
     end do
     if (iflag.eq.3) then
     print mode
        avg=0
        rms=0
        do i=1, ndat
           diff=(ydat(i)-func(xdat(i),x(1)))/sqrt(edat(i))
           avg=avg+diff
           rms=rms+diff**2
           write(syswr,'(10f8.3)')xdat(i),ydat(i),edat(i),
                func(xdat(i),x),diff
        end do
        avg=avg/ndat
        rms=rms/ndat-avg**2
        write(syswr,'('' mean '',f10.3,'' rms of pulls :'',2f10.4)')
```

```
avg, rms
     end if
     end
     function func(x,par)
     implicit none
     real*8 x,par(*),func
     func=par(1)
     end
 -----Makefile :
 # Simple Makefile for Minuit
INCLUDES =
PROGNAME = myprog
OBJS = myprog.o myfcn.o
LIBPATH = /usr/local/lib
CERNPATH = /usr/local/cernlib/$(ARCHNAME)/pro/lib
OTHERFILES = $(LIBPATH)/dmgrut.o
LDFLAGS = -L$(LIBPATH) -lhandypak -L$(CERNPATH) -lpacklib
FFLAGS = -q
$(PROGNAME): $(OBJS)
      $(FC) -o $(PROGNAME) $(OBJS) $(OTHERFILES) $(LDFLAGS)
$(OBJS): $(INCLUDES)
-----Minuit control cards :
set title
Minuit data cards for myprog example program
parameters
1 'average' 0.0 1.0
set print 0
minimize
save
stop
----Output Listing:
******************
 MINUIT RELEASE 93.08 INITIALIZED.
                               DIMENSIONS 100/ 50 EPSMAC=
 **************
                     MINUIT DATA BLOCK NO.
                                        1
******************
ENTER MINUIT TITLE, or "SET INPUT n" :
ENTER MINUIT TITLE, or "SET INPUT n" :
Minuit data cards for myprog example program
*****************************
ENTER MINUIT PARAMETER DEFINITION:
ENTER MINUIT PARAMETER DEFINITION:
   1 'average ' .00000E+00 1.0000
                                        no limits
```

ENTER MINUIT PARAMETER DEFINITION:

MINUIT: FIRST CALL TO USER FUNCTION, WITH IFLAG=1

FCN= 1242.450 FROM PARAMETR STATUS=RESET 2 CALLS 2 TOTAL EDM= unknown STRATEGY= 1 NO ERROR MATRIX

EXT PARAMETER

EXT PARAMETER CURRENT GUESS PHYSICAL LIMITS

NO. NAME VALUE ERROR NEGATIVE POSITIVE

1 average .00000E+00 1.0000

ENTER MINUIT COMMAND:

** 1 **SET PRINT .0000E+00

ENTER MINUIT COMMAND:

** 2 **MINIMIZE

MIGRAD MINIMIZATION HAS CONVERGED.

MIGRAD WILL VERIFY CONVERGENCE AND ERROR MATRIX.

FCN= 10.00000 FROM MIGRAD STATUS=CONVERGED 12 CALLS 14 TO EDM= .38E-15 STRATEGY= 1 ERROR MATRIX ACCURATE 12 CALLS 14 TOTAL

EXT PARAMETER STEP FIRST STEP FIRST SIZE DERIVATIVE NO. NAME VALUE ERROR SIZE DERIVATIVE 1 average 15.700 .44721 .77002E-03 .61629E-07 NO. NAME

ENTER MINUIT COMMAND:

** 3 **SAVE

CURRENT VALUES WILL BE SAVED ON UNIT 7: MYPROG.RESULTS

SHOULD UNIT 7 BE REWOUND BEFORE WRITING TO IT? 7 RECORDS WRITTEN TO UNIT 7:MYPROG.RESULTS INCLUDING 2 RECORDS FOR THE COVARIANCE MATRIX.

ENTER MINUIT COMMAND:

END OF DATA ON UNIT NO. 5

TWO CONSECUTIVE EOFS ON PRIMARY INPUT FILE WILL TERMINATE EXECUTION.

ENTER MINUIT COMMAND:

END OF DATA ON UNIT NO. 5

.....MINUIT TERMINATED BY END-OF-DATA ON PRIMARY INPUT FILE.

-----Results file:

SET TITLE

Minuit data cards for myprog example program

PARAMETERS

1'average ' .15700E+02 .44721E+00

SET COVARIANCE 1 .2000E+00

CERN software at SLAC

SLAC 8 November, 1995

Some preliminaries

Unix

We make the CERN library available on both the Sun and the RS6000. New versions are installed when CERN makes the tar files publicly available. The environment variable 'CERN' should be set to /usr/local/cernlib/\$ARCHNAME. This memo assumes that this variable is set. Another useful environment variable is CERN_LEVEL which you would generally set to 'new', pro', or 'old' to indicate which release of the CERN software you wish to use. The cernlib command is useful for determining which libraries are necessary to link your program. There is a man page.

VMS

If you will be using CERN software on SLACVX, put the command @CERN_HOME:CERN_LOGIN in your LOGIN.COM file. This will initialize logical variables (like CERN\$LIB). The VMS version of CERN software is not recommended as it is frozen at SLAC and is incomplete. Currently, the only working version of Paw on SLACVX is pawX11_m in the 'new' area.

VM

The CERN software on VM is not recommended and it is frozen at the levels listed below.

Current levels of the CERN libraries

	special	new	pro	old
Unix: SLACVX:			94b 93b	94a CNL201
IBM/VM:	94a*	94a*	93b	CNL201

^{*} Backlevels of Geant, Jetset and Isajet are on the VM 'special' disk. ** On Sun systems, this version requires f77 at level 3.0.1.

Directories (disks on VM) for each level of maintainence are listed below:

		Libraries		
	special	new	pro	old
Unix: SLACVX: IBM/VM:	GIME CERN94A	\$CERN/new/lib CERN\$NEW GIME NEWY	\$CERN/pro/lib CERN\$LIB on U/T disk	\$CERN/old/lib CERN\$OLD GIME CERNOLD
		Executables		
		new	pro	old
Unix:		\$CERN/new/bin	\$CERN/pro/bin	\$CERN/old/bin

SLACVX: IBM/VM:

CERN\$NEWEXE CERN\$CERNEXE CERN\$OLDEXE n/a n/a n/a

NOTE: Software put in the old areas may only be kept for a short time.

Libraries and executables

Libraries

On Unix libraries have file extension of 'a' and are prefixed with 'lib' (e.g. libpacklib.a). On SLACVX libraries have a file extension of 'olb' (e.g. packlib.olb). Libraries on VM have a filetype of txtlib (e.g. packlib txtlib).

Executables

A complete set of the CERN executables is available on Unix and SLACVX (93d only). Most of these have not been tested at SLAC.

Documentation and Help

There are several User's guides (in postscript form) kept at SLAC, for example Geant, Minuit, Higz and Paw. Printing these documents is generally ill advised due to their large size. Hard copies of these documents are available at the service desk. If you must print a CERN produced document, print the first few pages to see how it fits on the page (hint: man psrev). You may want to scale it to fit better on U.S. size paper. There is a Unix shell script to do this. It is called scaleps.sh and is in the bin directory with all the other CERN executables. It doesn't always do a great job.

For SLAC online documentation click below:

Guide to CERNLIB Documents and Usage at SLAC

CERNLIB structure and contents

Short Writeups of CERNLIB (from CERN)

Calling the CERN library from C (by Michael Dahlinger at GSI computing, Darmstadt).

FTPing files from CERN

CERN has an anonymous FTP service through which you can download CERN documentation, newsletters, software etc. Some of the important directories are prohibited unless you ftp from the "registered" SLAC computer (JUPITER). An example session follows:

```
ftp asisftp.cern.ch
Name (asisftp:goossens): anonymous
Password: username@usernode.domain.country {prefix username with a '-' for speed}
ftp> binary
ftp> cd cernlib/doc/ps.dir
ftp> get zebra.ps.gz
```

ftp> quit

Please observe the restrictions documented in the copyright notice as explained in the 'login' notice that you will see.

Other sources of information

PAW page (from CERN)

CERNLIB release schedule (from CERN)

Source

Source for Geant is kept locally in a form that requires processing by **patchy** or **cmz**, programs used by CERN to distribute/prepare source for compilation on various platforms. These tools are installed for the rs6000 and are located in the /usr/local/cernlib/rs6000 directory. A VAX version of cmz is available as well. For information on the CERN installation procedures and major component descriptions click below:

CERN Program Library Installation Guide (118 pages, postscript)

At SLAC, GEANT source is contained in the following directories:

/usr/local/cernlib/share/{version}/src/car contains the source for Geant. /usr/local/cernlib/share/{version}/include contains include & header files for several packages.

{version} in the above directories is pro or new.

Charlie Martin -- X2260 -- cwm@slac.stanford.edu
After April 1, 1996, contact Willy Langeveld, X2280 - wglp09@slac.stanford.edu

Index of /archive/1996/restore0103/comp/form

	Name	Last modified	Size	Description

	Parent Directory	22-Dec-1995 17:28	***	
থ	acctform.ps	01-Feb-1995 16:31	80k	
inguesila Marie de Carlo				

Apache/1.3.12 Server at www.slac.stanford.edu Port 80

Index of /archive/1996/restore0103/comp/fortran

particular and control of the contro	Name Last modified		Size	Description
		22-Dec-1995 17:2 30-Nov-1995 17:4 28-Nov-1995 14:1	.5 -	
	convert.f90	19-Oct-1995 10:0	6 56k	
	fortran.html	29-Nov-1995 09:4	4 8 k	
圓	nm_output_example	20-Apr-1995 14:2	2 2k	
	xldb 322 help	29-Jun-1995 09:1	1 176k	
闉	xldb_help	21-Apr-1995 10:2	1 134k	

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Introduction to Fortran at SLAC

SLAC 29 November 1995

There are several Fortran compilers available at SLAC. The following is SLAC specific information and pointers to more information. This page is under construction.

Computer Vendor supplied compilers at SLAC

RS/6000

Available versions

IBM supplies two Fortran compiler products; XL Fortran version 2 and version 3. Version 3 provides many enhancements, primarily full Fortran 90 support and exploitation of new hardware architectures. Version 2 is installed on each AIX workstation at SLAC. A single copy of version 3 is installed and available to almost all IBM machines on the network. Version 3.2.2 is recommended.

```
The following command names invoke the various versions

xlf_23 (alias f77_23): version 2.3

xlf (alias f77): version 3.2.0 (in fortran 77 mode)

xlf90: version 3.2.0 (in fortran 90 mode)

xlfnew (alias f77new): version 3.2.2 (in fortran 77 mode)

xlf90new: version 3.2.2 (in fortran 90 mode)

Version 3 files are located in __/usr/local/aixfort

Precise service level can be determined with the 'what' command, e.g.:

what /usr/local/aixfort/xlf32/usr/lpp/xlf/bin/xlfentry
```

Documentation

The following xlf90 documents (postscript) are available online:

- User's Guide (264 pages)
- Language Reference (490 pages)
- Optimization and Tuning Guide (Fortran, C & C++) (310 pages)
- Licensed Program Specifications

The following README files contain late information that may not be in manuals or other documentation.

- README file for xlf90 ver 3.2.0
- README file for xlf90 ver 3.2.2

IBM supplied sample programs

There are man pages for the commands xlf and xlf90 (xlfnew).

Debuggers

dbx is a command line symbolic debugger. The AIX Commands Reference manual documents dbx and its sub-commands and there is a man page.

xldb is a graphical symbolic debugger which supports the full Fortran 90 language in addition to C and C++ languages. It is invoked with the command:

```
xldb executablefilename
```

The executable must have been compiled with the -g option. For help:

```
xldb -h | more
```

or click here -> xldb help

Potential problems

Cannot run on Jupiter

There is currently a network bug that prohibits xlf90 (or xlfnew) from running on Jupiter due to a problem communicating with the license server from any "multi-homed" (more than one network connection) host.

-qextname option

We have changed one of the vendor option defaults, -qextname. This option will be in effect unless you specify -qnoextname. This option appends an underscore to the names of global entities. Puzzling unresolved external references may be caused by how this option is set. For dealing with the case of subroutine libraries built with conflicting settings of this option see extname.README

license server

xlf90 (and xlfnew) is managed by a license manager. There are now two license manager servers, one on Pandora and one on Farmboss. In order to compile, at least one of these must be running and reachable. The ls_stat command can be used to show information about licenses. If invoked with no arguments an X display appears that is fairly easy to figure out but just in case there is a man page.

SUN

f77

f77 is the Sun supplied Fortran compiler. A man page is available.

Third Party compilers and related tools

NAG Fortran 90 compiler

Recently SCS acquired a site license for the NAG (The Numerical Algorithms Group Ltd, Oxford, U.K.) f90 compiler on all current, and most potential, UNIX platforms of interest here at SLAC, with the exception of the NeXTs. The platforms covered are:

-DEC/Digital UNIX -Silicon Graphics/IRIX -DEC/Ultrix -Sun OS -Hewlett Packard/HPUX -Sun Solaris -IBM/AIX -PC/LINUX

The compiler is currently installed only for Sun OS, IBM/AIX and a limited use license - policies/NAG-f90 - for the NeXT which may soon go off of maintenance.

The command name for the NAG Fortran 90 compiler is **f90** and a man page is available.

The following files came with the NAG f90 software.

User's Note: AIX Sun4

Example Program: AIX Sun4

Fortran conversion programs

Converting Fortran to C

f2c is a Fortran to C converter. A man page is available. Also see f2c.ps.

fc (which uses f2c) is a f77-style shell script to compile and load fortran, C, and assembly codes.

For **fc** syntax click here -> <u>fc</u> shell script

Programs compiled with fc/f2c should link with libf2c.a which is in /usr/local/lib. Of course, the fc script does this automatically.

Converting f77 to f90

Convert

convert is a public domain program that does f77 to f90 source form conversion.

click here to read the source convert.f90 source

This file was down-loaded via ftp at jkr.cc.rl.ac.ukin in the directory /pub/MandR. Note that this program performs source form conversion and a small number of other changes. For true syntax conversion you need a commercial product such as LOFT90 from NA Software (marketing@nasoftwr.demon.co.uk)

Other sources of information

Subroutine libraries

Local notes about subroutine libraries (archives) Archive_library_info

SLAC AIX compiler usage statistics

Monthly data showing compiler usage by user, group and host. AIX compiler statistics

Fortran 90 information collection

Rutherford Appleton Laboratories' Fortran 90 information collection: (FAQ, tutorial, etc) comp-fortran-90

Fortran 90 tutorial

A tutorial from CERN: Fortran 90 tutorial

Fortran 90 Market Place

Fortran Market Place (software, books, libraries, etc.): Fortran Market Place

Fortran 95 Standard

Draft of the Fortran 95 Standard

SLAC HOME PAGE

Charlie Martin -- X2260 -- cwm@slac.stanford.edu

Index of /archive/1996/restore0103/comp/fortran/Draft-Fortran95

	Name	Last modifie	ed	Size	Description
٤	Parent Directory	28-Nov-1995	14:26	ind and the server self and a fall and a fal	
	README	30-Nov-1995	17:45	2k	
Ģ	aa.ps.gz	30-Nov-1995	17:14	41k	
Ď	ab.ps.gz	30-Nov-1995	17:15	25k	
	ac.ps.gz	30-Nov-1995	17:15	94 k	
	c01.ps.gz	30-Nov-1995	17:15	29k	
Ď.	c02.ps.gz	30-Nov-1995	17:15	37k	
	c03.ps.gz	30-Nov-1995	17:15	27k	
Ď	c04.ps.gz	30-Nov-1995	17:15	52k	
	c05.ps.gz	30-Nov-1995	17:15	69k	
D ₂	c06.ps.gz	30-Nov-1995	17:15	39k	
	c07.ps.gz	30-Nov-1995	17:15	98k	
	c08.ps.gz	30-Nov-1995	17:15	40k	
	c09.ps.gz	30-Nov-1995	17:15	72k	
	c10.ps.gz	30-Nov-1995	17:15	68k	
	c11.ps.gz	30-Nov-1995	17:15	25k	
	c12.ps.gz	30-Nov-1995	17:15	73k	
	c13.ps.gz	30-Nov-1995	17:15	145k	
	c14.ps.gz	30-Nov-1995	17:15	49k	
	index.ps.gz	30-Nov-1995	17:15	31k	
	intro.ps.gz	30-Nov-1995	17:15	24k	
	lot.ps.gz	30-Nov-1995	17:15	14k	
	title.ps.gz	30-Nov-1995	17:15	13k	
0	toc.ps.gz	30-Nov-1995	17:15	27k	

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30 Nov 1995

This directory contains the second working draft (dated 29 Nov 1995) of a new revision of the Fortran standard called Fortran 95. Public review of the first draft concluded last September. The number of comments was relatively small, reflecting the fact that Fortran 95 represents a more modest change than Fortran 90 did. Recently, WG5 and X3J3 agreed to submit this draft for balloting as a Draft International Standard (DIS) in February, 1996. When the official announcement of the public review (with instructions on submitting your comments) becomes available, I will post it to slac.lang.fortran (and append it to this README file).

The files in this directory are in gzip-ed, PostScript format and correspond to the chapters of the document as follows:

```
title.ps.gz # Title Page
toc.ps.gz # Table of Contents
lot.ps.gz # List of Tables
intro.ps.gz # Foreword and Introduction
c01.ps.gz  # Section 1
c02.ps.gz
            #
c03.ps.gz #
c04.ps.gz #
c05.ps.gz #
c06.ps.gz
c07.ps.gz
c08.ps.gz
c09.ps.qz
c10.ps.gz
cll.ps.qz
c12.ps.gz
c13.ps.qz
c14.ps.gz
           # Section 14
aa.ps.gz
          # Annex A
ab.ps.gz #
ac.ps.gz #
                    0
index.ps.gz # Index
```

The document is long (nearly 400 pages) so if you print the whole thing please use a duplex printer (the document is formatted assuming it will be printed in duplex mode) and print the chapters in separate jobs, preferably outside of normal working hours.

To print these files, login to a SLAC UNIX host, cd to this directory, and issue the following command for each file you want to print,

```
gunzip -c <file-id> | lpr -P<printer-name>
```

where <file-id> is the name of the particular file and <printer-name> is the name of the printer on which to print it.

To view a particular file from your X-terminal, issue the command,

```
gunzip -c <file-id> | ghostview -
```

Len Moss ljm@slac.stanford.edu

[The files in this directory will be removed after the close of the

public review period for Fortran 95.]

Index of /archive/1996/restore0103/comp/future

	Name	Last modified	<u>Size</u>	Description
	- Pro-Part and Contract of Con			
~	Parent Directory	22-Dec-1995 17:28	***	
	Mac-report1995/	01-May-1995 11:31		

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Index of /archive/1996/restore0103/comp/future/Macreport1995

parantal and the second	Name	Last modified	Size	Description
*	Parent Directory	28-Apr-1995 15:02		
	report.html	01-May-1995 09:08	42k	
圁	report ToC.html	01-May-1995 11:31	2 k	

Apache/1.3.12 Server at www.slac.stanford.edu Port 80

Final Report from the Mac Pilot Committee

April 1, 1995

Abstract

The Mac Pilot Committee investigated and determined the degree of independence of the SLAC networked Mac environment from VM during the period of October 1994 - March 1995. This report contains the committee findings and recommendations. A summary of the Committee's recommendations is given below.

- 1. More effort needs be applied to solving the problems that this committee has identified. It serves only a limited use to appoint a new committee that will identify the same problems that this committee did. We recommend the following problems receive the highest priority:
 - o Faster Binlist access (see section WWW and Probtrak #12392)
 - O Site-wide supported mail system (see section *Email*)
 - O Better user documentation for Listserv (i.e., Majordomo on UNIX)
 - Read/write access to information in commonly used VM databases (e.g., ELDreq, Binlist, ESH Training) (see Probtrak #12393)
 - o Increased SCS support for user training and consulting (see the section
 - O Transparent automatic file backup (see Probtrak #12394)
 - O Streamlined hardware and software procurement (see section Acquiring Macs
- 2. The VM Phaseout Committee should formally adopt a project management system as a tool for managing the entire VM phase-out including the resolution of identified problems and obstacles to converting users from VM to Macintoshes and PCs and that someone be named as the project manager to track and oversee this effort. We also recommend that one person be named to manage the Probtrak report for both the PC and Mac Pilot Committees and provide feedback for the committees' final reports.
- 3. The Help Desk should acquire a formal problem tracking system (trouble ticket system) that supports searches for keywords, details successful fixes applied, etc.
- 4. Macintosh models Mac Plus, Mac SE and SE/30, Mac II, Mac Classic, and Mac LC should be phased out as soon as possible (see section Prepared Hardware and Software). Also, Lab management needs to budget for periodic replacement of Macs to keep up with hardware and software changes.
- 5. We suggest that these candidates be considered for membership of the follow-on Mac Committee:
 - O Sharon Bolton, BSD
 - O Tanya Boysen, Barbar
 - O Jean Lee, Research Division
 - Control of the Con
 - o Mary Crume, SCS
 - Billie Bennett, SCS
 - George Maclin, SCS
 - Ask Katherine Cantwell for SSRL recommendation
 - Ask John Windberg for ES&H recommendation
 - o Cheryl Hultquist, Tech Division
 - O Andrea Chan, PEP
 - O Janice Dabney, Tech Division
- 6. The second group should be asked to:
 - o carefully review and confirm or refute the problems we have identified in Probtrak and our

- interim and final reports,
- o concentrate on identifying new problems and roadblocks to conversion to Macs and documenting new insights into existing problems,
- present and future committee members should continue to add and update existing problems in Probtrak's Mac-Ph until a replacement mechanism can be found,
- o name a chairperson,
- o call on Ago and Ilse for technical and documentation assistance as needed.
- 7. The next committee should investigate smaller, more functionally limited but adequate applications such as Claris Works for simple documents. However, care must be taken to address compatibility with currently recommended software. Although Claris Works is said to be compatible with Word, it behooves us to verify this for ourselves.
- 8. SCS should investigate software license management systems such as key server.
- 9. The following recommendations concern WWW:
 - O Binlist access using WWW is too slow. To be readily available for a Binlist search, WWW needs to be running at all times.
 - The design of the SLAC Home Page should be opened for community input and discussion. (This recommendation is already being implemented by the Ad Hoc SLAC Web Pages Style Committee, whose recommendations are expected to be presented to the WWW Technical Committee by June 1.)
 - O The committee acknowledges the problems of converting longer, more formal documents prepared in Word and FrameMaker to HTML and recommends that SCS continue to look for a PostScript viewer, translators, and portable document formats (e.g., Adobe's Acrobat).

Committee Charge

In the memorandum of October 11, 1994, Chuck Dickens charged the members of the committee 1 to "act as a pilot representing the 'average VM user' at SLAC and actually cut your ties with VM and live on a Mac doing your day-to-day work." He listed as a second purpose "to identify what is available and needed to accomplish this, to help us evaluate possible solutions and work-arounds, and finally to leave a documented record of how the 'average VM user' could acquire a Mac and get off VM." The goals were more specifically stated as follows:

- 1. Characterize the degree of independence of the SLAC networked Mac environment from VM at the present time.
- 2. Identify those VM services that continue to be needed, e.g., Binlist or ELDReq.
- 3. Identify those services that are less complete on the Mac.
- 4. Provide a list of general network, UNIX, operational, and database requirements for the conversion to the networked Mac.
- 5. Compile a preferred list of services and applications for the average Mac user. In the absence of Standards Committee recommendations, we shall use the "most common in use" rule.
- 6. Test existing documentation and supplement where feasible with a goal of providing a set of documentation for the Mac user and the potential Mac user to
- 7. Designate a representative to attend the Monday VM Phaseout meeting (rotating as appropriate is fine).
- 8. Help designate who should be in the second wave of VM users to convert to the Mac world.

Clarifying the Committee Charge

The committee met for the first time with Chuck Dickens and Les Cottrell on October 21 to discuss and

clarify the charge to the committee. We noted that Ilse Vinson did not yet have access to a Mac (her order for a Power Mac had just been submitted), Barbara Barrera needed QuickMail, and Teri Church needed to reroute her email to her Mac. All other members were operationally ready to begin the committee's work.

Attendees outlined the beginnings of three tables:

- Table 1 lists VM functions; whether there is or is not an equivalent function on the Mac; if there is, whether it requires VM indirectly (e.g., Binlist on the Mac requires VM indirectly); how effective the equivalent Mac function is and whether documentation exists.
- Table 2 lists services used or needed on the Mac, but not on VM (e.g., a PostScript viewer is needed, but not yet available, on the Mac; it is not available and not needed on VM).
- Table 3 lists the preferred services and applications on the Mac (e.g.,

Later, Chuck made four additional requests of the committee:

- 1. A final report targeted for the end of February 1995. The completed tables described above will be included.
- 2. An interim report in December, which was submitted as requested.
- 3. That the committee evaluate WWW and state the committee's view on where WWW is lacking and where it seems inappropriate to use (requested on December 8).
- 4. That we estimate how much of Ago's and Ilse's time is needed for technical and documentation support for the next Mac Pilot group and for the conversion of say, 500, Mac users (requested in February).

Final Report on the Committee's Work

The committee met weekly from October 16 until March 8, 1995. Arla and Janet generated meeting minutes. Arla attended the Monday VM Phaseout meetings. Barbara organized, input, and updated the tables. Ago provided technical assistance to committee members. Teri proposed and coordinated requirements for Probtraking members' experiences and problems with living on the Mac without VM. Ilse recommended a suite of documentation for Mac users, drafted this report, and started to update existing Mac documentation.

Recording Experiences and Problems

The committee agreed that Probtrak is the best tracking system for problems and experiences committee members encountered and the best reporting system for communicating them to the VM Phaseout Committee, even though it is a VM-based system. Each problem was assigned to a person responsible for it, and given a priority2 and solution status3. A new report was distributed weekly for the VM Phaseout Committee and the Mac Pilot Committee. The committee's Probtrak was and still is being used to drive the phaseout effort and has recently been expanded to support the PC Pilot Committee. Of the 40 problems and experiences currently reported, 24 have been closed. However, not all 24 closed problems have necessarily been fixed: some were closed because they were incorporated into other open problems; some were closed because they are not likely to be resolved in the near term.

Some committee members were more dependent on VM for their day-to-day work than others. For example, Teri found that she had to access VM-based databases (mostly Probtrak, ELDReq, and Purch) 143 times in 15 days.

Attached to this report are a summary of all open and closed problems in the latest report Probtrak Report, a copy of the entire Probtrak report to date, and Tables 1 and 2. Tables 2 and 3 were combined to avoid redundancies (see *Clarifying the Committee Charge*). To view and print the summary and Tables 1 and 2, see *Viewing/Printing Tables Referenced in this Report*.

Expanding the Pilot Concept

The committee recommended and the Phaseout Committee agreed to expand the Mac Pilot Committee concept to PCs by inviting Cathie Dager to Mac Pilot Committee meetings as an observer. Cathie's attendance was expected to benefit her leadership of the PC Pilot Committee and Macs and PC support coordination.

WWW

Chuck asked the committee to address these two questions:

- 1. For what is WWW practically not useable?
- 2. For what could WWW be useful if it were adjusted (for example, if the home page were made more useful)?

Making Documents Available on WWW

Ilse investigated the availability of a PostScript viewer for the Mac. Although GhostView, a freeware UNIX PostScript viewer, has been ported to the Mac, it is still inadequate. Ilse was unable to locate a commercial PostScript viewer.

She also investigated the problem of translating Microsoft Word and FrameMaker documents (with and without graphics) for WWW viewing on Macs, PCs, and UNIX. She found it doable but requiring quite a bit of effort especially for Word documents. Also, the freeware HTML translators that she used are not yet located on the public Mac server and the UNIX translators, fm2html and WebMaker, need more work, documentation, and publicity to make users aware of them. Shareware graphic converters exist, but again none on our public Mac server. It may also soon be possible to make FrameMaker and Word documents available on WWW in Adobe Acrobat's PDF format since the Acrobat PDF viewer is free. Other alternatives continue to emerge (e.g., the recently announced Quadralay WebWorks Document Translator for FrameMaker, Common Ground from No Hands Software, HTML Web Wizard for Word 6.0 from NICE Technologies).

Observations

- WWW is well suited for multi-media applications and documents.
- WWW is especially well suited for various information files, such as how to order modems and X terminals and recommended Mac and PC configurations, which tend to get lost otherwise (despite announcements in news items, Netnews groups, and *Interaction Point* articles).
- It is important that all SLAC WWW pages indicate the date the page was last updated and the responsible author.

- WWW doesn't lend itself to locating the object of one's search quickly (unless one knows where it is in advance and perhaps even has it on one's hotlist). It takes time to browse the Web to become familiar with its resources and to make it useful. It is difficult to locate something again at a later time unless one has noted its URL or the path by which one located it the first time. In fact, bookmarks, a method for permanently storing and organizing one's favorite pages, are supported in all current browsers. We understand that SCS is currently working on adapting a search engine so that it is tailored to the SLAC set of WWW information.
- One committee member pointed out that home pages are disappointing in the lack of substance behind them.
- We need written procedures, no matter how rough, on how to write a WWW page and how to get it installed (even though the procedures are evolving). Currently, each person wishing to put a page on WWW needs individual instruction.
- WWW is good for things that are used occasionally by most people. For example, it could be useful potentially for filling out forms (e.g., Travel Authorization form, IP Address Form), possibly even routing them if the signature authentication problem can be solved. Even without a routing function, users could be certain that they used the latest version of a form rather than an obsolete one that has been sitting in someone's desk for some time.

Recommendations

- 1. Binlist access using WWW is too slow. To be readily available for a Binlist search, WWW needs to be running at all times. Yet many Macs are too underpowered to allow for that. Consequently, the committee recommends that SCS place a very high priority on getting quick access to Binlist. (We understand that SCS is actively working on the problem.) WWW may not be the best mechanism.
- 2. No one single design of the SLAC Home Page is likely to please everyone. The committee recommends that the issue be opened for community input and discussion. Community comments on Home Page prototypes can be beneficial as a way of getting input and feedback. Further, we recommend that SLAC Publications staff be considered as a resource for helping design the appearance of the SLAC Home Page and other pages when authors request their assistance. This recommendation is already being implemented by the Ad Hoc SLAC Web Pages Style Committee, whose recommendations are expected to be presented to the WWW Technical Committee by June 1.
- 3. For formal documents that need to be available in both hardcopy and on WWW, there are currently no recommended and supported user-friendly translators that convert Word and Frame documents to HTML, the document format viewable through all browsers on all supported platforms. Short, informal documents can be made available in ASCII format or a few, simple HTML commands can be added either manually or by using one of several HTML editors. The committee acknowledges the problems for longer, more formal documents, and recommends that SCS continue to look for a PostScript viewer, translators, and portable document formats (e.g., Adobe's Acrobat).

Issues and Problems

Mac User Documentation

Ilse recommended a suite of Mac user documentation that includes an update of existing documentation: *Using the Mac at SLAC*, a fairly comprehensive users' guide; a list of recommended hardware and software; and *How to Tailor Your Mac for Use at SLAC*. If possible these documents should be available from the WWW Macintosh page.

The current status of the documentation update is:

- 1. The updated draft of *Using the Mac at SLAC* needs to be reviewed by Ago.
- 2. A recommended hardware list, current as of 3/13/95, is available from the WWW Mac page and in the how-to-order section of the Introduction to Computing at SLAC page.
- 3. How to Tailor Your Mac for Use at SLAC has been updated and is available on Public Disk 1 and at the Help Desk.
- 4. Recommended software list needs to be added to the WWW Mac page and will be based on the recommendation in this report (see Table 2).

Ilse wrote a how-to section on file exchange between platforms (Mac, PC, and UNIX) for *Using the Mac at SLAC*. This section was given to committee members and through Arla to the Research Division's Administrative Assistants for review and comment.

Acquiring Macs

A number of committee members had experiences with ordering a Macintosh and/or Macintosh peripheral equipment at the beginning of the pilot. For example, the turnaround between order and receipt of Ilse's Mac was eight weeks. The committee perceives the turnaround time between order and receipt to be intolerably slow and a real obstacle to getting people to move from VM to Macs. The experiences of and a proposal for improving the process is documented in Probtrak problem 12228, which is currently open and work is in progress. It was referred to Bill Johnson.

The committee recommends SLAC adopt a method for ordering computer hardware and software that is easy for users to use and shortens lead times of competition and delivery to at least two to three weeks. For example, SLAC Purchasing might consider adopting LLNL's method of ordering bulk (rather than one of kind) computing hardware (and possibly software) using blanket purchase orders for which pricing and deliverables have already been established. This could make the procurement process easier and less time-consuming for users, increase SLAC's opportunities to obtain competitive prices by bundling purchase quantities, make cost management easier and more efficient, and assist in expediting timely delivery.

Preferred Hardware and Software

SCS currently recommends the basic configurations of the PowerMac 6100/66, 7100/80 and 8100/100 (see link on the Web Mac page for more details). The 16 MB RAM of these configurations is necessary to run the OS, a Web browser (for accessing Binlist), and a couple of productivity applications concurrently. In most cases, adding a virtual memory manager such as RAMDoubler will give additional flexibility.

The recommended software (see Table 2) will run on older Macintosh models, but performance may be slow, especially on lower-end machines with a slow processor, no support for virtual memory, and a small amount of RAM. Working on these machines will become increasingly painful as new application versions require more and more compute power and memory.

We recommend that Macintosh models Mac Plus, Mac SE and SE/30, Mac II, Mac Classic, and Mac LC be phased out as soon as possible. SLAC management needs to budget for periodic replacement of Macs to keep up with hardware and software changes. We estimate that about 170 of the 600 Macs onsite need to be replaced. Support for these machines is no longer feasible with SCS's limited resources for reasons given below.

Model Affected

Mac Plus, Mac Classic,

Mac SE, Mac II, Mac LC

Mac Plus, Mac Classic,

Mac Plus, Mac II

Mac Plus, Mac Classic,

Mac Plus, Mac Classic,

Mac Plus, Mac Classic,

Mac Plus, Mac II

Mac SE/30, Mac II

Characteristic

Reason

cannot support 32-bit

addressing or virtual

memory

memory

cannot run the OS and a

of physical RAM memory

reasonable amount of

Mac Plus, Mac SE, Mac II low-density floppy disk cannot load shrinkwrapp drive software from diskettes

Two other Macintosh models, the Classic II and the LC II, support a maximum of 10 MB of RAM. This makes them unsuitable for efficient use in the future unless used to run simple applications, such as terminal emulation and light-weight word processing. We recommend that the models mentioned not be upgraded beyond System 7.1 and that new versions of applications (e.g. Word 6, Excel 5) not be installed.

For the committee's recommended preferred services and applications, see Table 2. Our selections considered common usage by present SLAC Mac users, PC and Mac compatibility, and software reliability.

Email

Several committee members have participated in the Oracle Office trial. After trying it for several weeks, Arla and Teri had serious reservations about selecting Oracle Office as a Lab standard. Arla had several problems with Oracle Office missending mail offsite and felt that the calendar facility was impossible for staff who need to keep several calendars. (Oracle Office requires 5 MB memory for each calendar one wants to keep open. Since some secretaries are responsible for several conference rooms and may need to work with 6-7 calendars, this quickly becomes untenable.) Also, many older machines onsite are not powerful enough to spare 5 MB memory for even one calendar, so many people would need to find another alternative.

After hearing about Arla and Teri's trials and tribulations, others on the committee decided against loading Oracle Office. Barbara decided against it because of the negative experience of committee members and that of many people in her group. Committee members installed and tried Eudora, a client for a POP server that was recently installed on UNIX, have thus far had positive experience with it.

The committee completely concurs with the decision not to purchase Oracle Office and recommends that a site-wide supported mail system be chosen and implemented as quickly as possible.

User Training

User training is a serious issue. In the past when SCS had more staff for Mac support (3.5 people), SCS was able to do a fairly good job of training Apple Support Coordinators (ASCs) who in turn consulted with and trained their users. At the present support level of .5 people (Ago), SCS cannot even find time to keep a current list of ASCs, not to mention training them in the use of currently recommended software and hardware.

Ago has recently reinstituted monthly ASC meetings. He cannot afford to spend time preparing formal training for these meetings. Instead, he passes along Mac news that he has picked up in his readings of trade journals and from vendor contacts and solutions to technical problems he recently helped users solve. The meetings are a forum in which the ASCs can share information about problems and solutions and other relevant news.

Critically needed are classes about SLAC dependencies so that new Mac users can tailor and use their Mac effectively in the SLAC environment. For example, when Barbara switched groups, her platform of choice changed from the PC to the Mac. Since SLAC has no formal training program (or even a rudimentary one covering SLAC-specific Mac issues), Barbara expected to train herself. But the demands of the job in the new group left her virtually no time. Fortunately, she was able to use VM as a temporary crutch. For example, she switched to LaTex on VM for word processing and moved to MS Word after she'd become relatively comfortable with the Mac.

Campus Mac application classes might be useful although much time is wasted in traveling there. The SLAC Library should have the resources to continually update their training tapes to the currently supported software. To train people, SCS needs additional resources and a training room outfitted with Macs that simulate the users' desktop environment. Equally important, SLAC management across all divisions needs to recognize the importance user training plays in a successful migration and support such training by providing staff time and budget.

The committee recommends:

- 1. increased SCS support for user training and consulting,
- 2. that lab management support and reward user training and consulting as formal job duties of ASCs,
- 3. lab management support for relevant Mac classes offered by Campus for staff,
- 4. support for acquisition of appropriate Mac training materials by the SLAC Library.

Managing the VM Phaseout

This committee has spent considerable effort identifying problems and dependencies on VM that need to be solved to allow users to move from VM to the Mac. Users need to have some sense of when these problems will be solved because they need to make a different adjustment to a solution that is three months off than to one that is three years away. Also, the VM phaseout involves virtually everyone at SLAC. So, communication about the status and coordination of the effort is

important to effecting a timely phaseout.

The committee recommends that the VM Phaseout Committee formally adopt a project management system as a tool for managing the entire VM phase-out including the resolution of identified problems and obstacles to converting users from VM to Macintoshes and PCs and that someone be named as the project manager to track and oversee this effort. We also recommend that one person be named to manage the Probtrak report for both the PC and Mac Pilot Committees and provide feedback for the committees' final reports.

Because the VM Phaseout is a SLAC-wide effort requiring the active participation and allocation of resources of all divisions, we suggest that the VM Phaseout project manager report to the SLAC Lab Director, Burt Richter.

The next Mac Committee

We understand that another group who will convert to the Mac as their primary platform is to follow this committee. We expect the next Mac committee to need the services of Ago and Ilse. Many of the problems our committee has identified are still open (see attached Probtrak report). Members of the next committee may need Ago's help to cope with these unsolved problems and also in trouble-shooting new problems (and making sure a problem is not caused by the user's lack of experience) and perhaps in validating or refuting problems our committee has identified. Ilse's involvement may be needed to respond to requests for adding new documentation and correcting, clarifying, or expanding existing documentation.

We suggest that these candidates be considered for membership of the follow-on Mac Committee:

- o Sharon Bolton, BSD
- O Jean Lee, Research Division
- Larry Sherman, Tech Division
- Mary Crume, SCS
- o Billie Bennett, SCS
- o George Maclin, SCS
- Ask Katherine Cantwell for SSRL recommendation
- Ask John Windberg for ES&H recommendation
- Cheryl Hultquist, Tech Division
- Andrea Chan, PEP
- O Janice Dabney, Tech Division

We recommend that the second group be asked to:

- 1. carefully review and confirm or refute the problems we have identified in Probtrak and our interim and final reports. In addition, they should concentrate on identifying new problems and roadblocks to conversion to Macs and documenting new insights into existing problems,
- 2. continue to add to and update existing problems in Probtrak's Mac-Ph until a replacement mechanism can be found,
- 3. formally name a chairperson since the chosen members may not have the close working relationship that most of our committee members have.

- 4. call on Ago and Ilse for technical and documentation assistance as needed, and
- 5. keep formal meeting minutes on which Ago and Ilse are copied.

The Help Desk

In case of problems the user contacts the Help Desk. The staff should be able to help with basic advice over the phone or dispatch people for minor repair work at the user's office. The current mode of operation of the Help Desk has two major shortcomings:

- 1. The staff changes frequently, which doesn't give enough time to acquire
- 2. The Help Desk is not using an adequate computerized system for tracking problems and their solutions. Such a system should be user-friendly, fully searchable, and able to document problems, symptoms, successful fixes applied, person in charge, time stamps, etc. When a new problem arises, it is essential that this system has a full search capability for retrieving solutions that have been successful under similar conditions. Probtrak is not an adequate solution: it doesn't automate any of these functions and doesn't support keyword searches.

We recommend that the Help Desk acquire a formal problem tracking system (trouble ticket system) that supports searches for keywords, details successful fixes applied, etc.

Simple Software Applications for Simple Tasks

Many Mac users need word processing software for only simple documents, such as memos and letters, and spreadsheets with only occasional need for the more sophisticated word processing and spreadsheet software. Word and Excel, for example, have served users well in the past but have now grown so large and complex that they are overkill for simple documents.

The industry is moving from an application-oriented environment to a document-oriented one. This move will make it easier to match the size and sophistication of the application to the degree of sophistication needed in the document. Upcoming implementations will allow the user to rely on small, independent tools to craft a document. Only the currently needed tools will reside in memory, thus making large all-in-one applications a thing of the past. Apple Computer is moving towards this with OpenDoc, which is to be released this year.

In the meantime, we recommend that the next committee investigate smaller, more functionally limited but adequate applications such as Claris Works for simple documents. However, care must be taken to address compatibility with currently recommended software. Although Claris Works is said to be compatible with Word, it behooves us to verify this for ourselves.

Software License Management

Currently SLAC has no control over the software applications that are used or their release level. This contributes to several problems.

- 1. Increased difficulty in sharing files within and across supported platforms.
- 2. Lack of control over software costs. It is so cumbersome to track software acquisitions that few groups maintain a database of acquired software. SCS is one known exception.

3. Encourages proliferation of different software packages.

We recommend that SCS investigate software license management systems such as a key server. Licensed software would give users access to software that they need only occasionally, reduce software costs, and reduce the time spent by groups, such as SCS, to track software purchases.

If the purchase of new server hardware to replace Public Disk 1 is approved, it will have sufficient capacity to test software license management systems. Ago recommends, however, that the test involve a sizable workgroup of more than 25 people who use a substantial number of copies of a certain application.

Conversion and Long-Term Support Requirements

Our estimate for long-term support is at least 2.5 to 3 FT4. This assumes that support for electronic mail and off-site remote access continues to come from the Networking Group.

To provide support to users during their conversion to the Mac, we estimate that at least twice that of long-term support or 5-6 FTE is needed for SLAC's current 600-650 Macintosh users. Hence, we estimate .5 FTE is needed to convert each group of 50 users. That estimate assumes that we have the assistance of Apple Support Coordinators (ASC). This program has languished for some time due to lack of resources, but Ago has begun to convene monthly ASC meetings in the hope of leveraging their effort.

During the conversion phase, the ASCs will need to dedicate a substantial amount of their worktime to assist end-users on activities such as answering general questions, helping with installations and configurations, investigating incompatibilities and problem reports, and dealing with requirements that are specific to their workgroups. ASCs require the blessing and support of their supervisors for this. Doing it "on the side" in addition to their regular tasks will not work. Rather, it will lead to frustration for the ASC and for the users and most likely lead to the demise of the ASC program. If management does not intend to actively support a leverage support plan, no attempt should be made to use the ASC program as a conversion strategy. Also, it is unclear at this point how many ASCs might be available and agreeable to assist in the conversion.

It also needs to be kept in mind that typically the support needed at the beginning of an individual's or group's conversion effort is a great deal higher than at the end. Therefore, our estimate of .5 FTE is likely to fall short at the beginning of a group's conversion.]

Observations

In addition to difficulties and problems noted in the Probtrak report, we wish to note a few anecdotal experiences about life on the Mac:

- o "Simple" Application Installation. In installing Microsoft Office onto her new Mac, Arla ran into a difficulty part way through the process. It took a couple of days, including help from Ago, to determine faulty diskettes as the source of the problem.
- Setting Up a Mac. As a manager trying to get the job done, Arla spent the better part of one week assisting her staff setting up three Macs with the appropriate software environment and backing up and transferring files. One needs to keep in mind that all the people involved were experienced Mac users.

- O User Support. Ago spent a considerable amount of time solving Steve William's problem with an encoded mail enclosure. He eventually determined that the enclosure had not been decoded automatically by QuickMail because the sending mail program had used encoding software that was not standard on the Mac. Ago observed that the number of such cases being reported is increasing. For two hours Ago helped a user who thought he had a problem with an application only to determine that the user's non-standard mouse with a curly cursor was causing the problem.
- Orawford have experienced problems on their 6100/60 and running Microsoft Office applications that have resulted in "Out of Memory" messages, system crashes, and system freezes. Ilse has not experienced any of these problems on her PowerPC Macintosh 7100/66. Ago suspects that the problems may be due to Microsoft's software bugs. Microsoft is expected to release a bug fix shortly.

Synchronizing Users on Supported Software/Hardware.

The committee observed that the time period between major changes to the operating system and major applications on VM was relatively long and created a stable environment for users. In the distributed environment, releases of recommended hardware and software occur much more frequently and asynchronously. Keeping all Mac users in synch with respect to major recommended software and hardware will be no small task, assuming that it is even doable.

Recommendations

The committee offers the following recommendations.

- 1. More effort needs be applied to solving the problems that this committee has identified. It serves only a limited use to appoint a new committee that will identify the same problems that this committee did. We recommend the following problems receive the highest priority.
 - Faster Binlist access (see section WWW and Probtrak #12392)
 - Site-wide supported mail system (see section *Email*)
 - Better user documentation for Listserv (i.e., Majordomo on UNIX)
 - Read/write access to information in commonly used VM databases (e.g., ELDreq,
 - Improved file sharing between supported platforms (see Probtrak #12166)
 - Increased SCS support for user training and consulting (see the section *User Training*)
 - Transparent automatic file backup (see Probtrak #12394)
 - Streamlined hardware and software procurement (see section Acquiring Macs)
- 2. The VM Phaseout Committee should formally adopt a project management system as a tool

for managing the entire VM phase-out including the resolution of identified problems and obstacles to converting users from VM to Macintoshes and PCs and that someone be named as the project manager to track and oversee this effort. We also recommend that one person be named to manage the Probtrak report for both the PC and Mac Pilot Committees and provide feedback for the committees' final reports.

- 3. The Help Desk should acquire a formal problem tracking system (trouble ticket system) that supports searches for keywords, details successful fixes applied, etc.
- 4. Macintosh models Mac Plus, Mac SE, Mac II, Mac Classic, and Mac LC should be phased out as soon as possible. Lab management needs to budget for periodic replacement of Macs to keep up with hardware and software changes.
- 5. We suggest that these candidates be considered for membership of the follow-on Mac Committee:
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 - Billie Bennett, SCS
 - George Maclin, SCS
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 - Ask John Windberg for ES&H recommendation
 - Cheryl Hultquist, Tech Division
 - Andrea Chan, PEP
 - Janice Dabney, Tech Division
- 6. The second group should be asked to:
 - carefully review and confirm or refute the problems we have identified in Probtrak and our interim and final reports,
 - concentrate on identifying new problems and roadblocks to conversion to Macs and documenting new insights into existing problems,
 - present and future committee members should continue to add and update existing problems in Probtrak's Mac-Ph until a replacement mechanism can be found,

- name a chairperson,
- keep and distribute formal meeting minutes,
- call on Ago and Ilse for technical and documentation assistance as needed.
- 7. The next committee should investigate smaller, more functionally limited but adequate applications such as Claris Works for simple documents. However, care must be taken to address compatibility with currently recommended software. Although Claris Works is said to be compatible with Word, it behooves us to verify this for ourselves.
- 8. SCS should investigate software license management systems such as key server.
- 9. The following recommendation concern WWW:
 - Binlist access using WWW is too slow. To be readily available for a Binlist search, WWW needs to be running at all times.
 - The design of the SLAC Home Page should be opened for community input and discussion. (This recommendation is already being implemented by the Ad Hoc SLAC Web Pages Style Committee, whose recommendations are expected to be presented to the WWW Technical Committee by June 1.)
 - The committee acknowledges the problems of converting longer, more formal documents prepared in Word and FrameMaker to HTML and recommends that SCS continue to look for a PostScript viewer, translators, and portable document formats (e.g., Adobe's Acrobat).

Footnotes

- 1 Romain Agostini, Barbara Barrera, Teri Church, Janet Dixon, Arla LeCount, and Ilse Vinson.
- 2 Priorities include: needs immediate attention (1), needs evaluation and subsequent action (2), and personal experience (3).
- 3 Solution status include: Open, under investigation (1); Open, awaiting vendor response (3); Open, work in progress (5); Closed, hardware fixed (10); Closed, software fixed (11); Closed, documentation error fixed (12); Closed, duplicate problem (14); and Closed, user error (15).
- 4 A report based on organizations that MacWeek surveyed and reported in a Special Report in the 1/3/94 issue indicated that 1 person per 40 Macintosh users was needed for long-term support. At SCS's current level of support of .5 FTE (Romain Agostini), SLAC operates at one-thirtieth of that level.

Viewing/Printing Tables Referenced in this Report

Tables 1 and 2 and the Probtrak Summary cannot be displayed by WWW. They can be printed as PostScript files, or, if you have access to a PostScript viewer on your PC or workstation, viewed. Their file names are as follows:

On UNIX: files /usr/local/doc/futures/Mac-report1995/table1, /usr/lo

- report1995/table2, and /usr/local/doc/futures/Mac-report1995/probrak-summary.
- On the Mac: files Public Disk1:Mac Pilot Committee Report 4/95:table 1.ps, Public Disk1:Mac Pilot Committee Report 4/95:table 2.ps, and Public Disk1:Mac Pilot Committee Report 4/95:Probtrak Summary.ps
- On VM: files macrepor ps *, table1 ps *, table2 ps *, probtrak ps *. File macrepor readme * describes how to print the files from VM.

Index of /archive/1996/restore0103/comp/how-to-order

Name	Last modified		Description		
Parent Directory	22-Dec-1995 17:28	Principalitatish kalifologish bi dinabati u nulusungan kippi garapatan kalifologish bi dinabati u nulusungan kippi milan			

Apache/1.3.12 Server at www.slac.stanford.edu Port 80