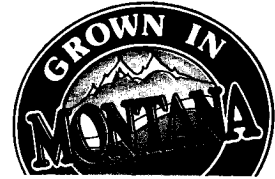3 March 1992

GREETINGS WOODY & STEINA!

Here's the best of what I've got from my files; photos and copies
of stuff. The copies are for you to keep. The photos are mostly
one-of-a-kind, ORIGINALS, which I value immensely and of course
need back; so keep 'em secure...I've made a PHIL's PHOTO LIST to
help keep us straight.

- The copied stuff:

Woody, this PHIL'S UPDATE REC'd. from DAN - OCT. 1979 is the last
I got from Dan. Much of it is irrelevant to my IP because mine
was already made long ago...the clarity of your copies is better
(darker) than my original copy, and the parts listings are terribly
unreadable about; Dan was kinda' being care-less around that time.
There's also modules which you don't have probably which Dan and I
made exclusive to the so-called "classic IP"; the HI-Z low-pass
INPUT module for audio signals in; the HORZ. and VERT. SWEEP
GENERATOR for doing raster graphics stuff; the large OUTPUT
MIXER module (board); the JOYSTICKS; the GEN LOCK and CAMERA
INPUT module (designed and made in consultation with/by Richard
Mandeberg), a beautifully stable device! All these and then some
are part of my IP - thus, the claim the largest ever built!

The DISTRIBUTION RELIGION copy is from early-on, drawings and such
I made to help other builders get on with it...

The ST. OLAF and the IP copy is Dan's report on one of the first
public exposures of the IP set up in an Inflato outside...

The CHICAGO, THE CITY AND ITS ARTISTS copy has some chronological
bio-data in it...the photos in the back, I do not have, only the
zerox copy I copied this from...

The IN CONSECRATION OF NEW SPACE copy is (first 2 pages) reduced
from a 16" x 22" very old poster. See #5 photo of this early event.

The SYSTEMS DIAGRAM of INTERACTIVE ELECTRONIC VISUALIZATION EVENT
(at Dr. Tom's house...) is a fun thing I made up to "promo"
the first time Dan, Tom, Bob Snyder, Geunther Tetz, and I ventured
forth to do live public performance shows...

Steina, you mentioned something about GENERAL MOTORS tape so I copied
all I got on it for you...

In a couple of days, after I get my income-tax-shit gone, I'll be
diving into my old boxes of tapes, searching for anything relevent.
Also, will get some current photos made of my MAGNUM IP set-up here
and me, as you advised Woody. I'm planning on black and white (not
color) - hollar if that's not okay!

Spoke with Mark Fausner after talking with you folks last Sunday, and confirmed all necessary back-up modules for a successfull Austria show-off. He's ready topack and UPS ship whatever is needed but I'm holding off until you/me confirm exactly what is going to be do-able because there's a jillion little things he/Harland Snodgrass/and I have in common therein Minneapolis which may be useful and needed...
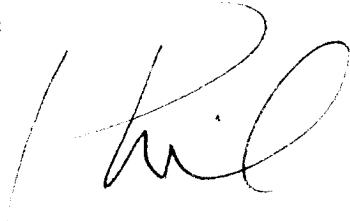
...my next communique to you both (in a week or so) will block-diagram-out what I've got in mind for an IP system show-off. I gotta' feeling it's about twice as large and cumbersome (and interactively powerful too) as you might be assuming. So I figure a good "picture" of the extensivene$$ I'm imagining would be useful...and we can scale-down if nece$$ary from there. I strongly desire to have/make the IP as explicitly expansive as it can be; parallel processes on-going thru it for the duration of the show if possible. I believe the mere physical scale of the "monster" speaks loudly!...and also, a huge pain-in-the-ass shipping, setting-up, etc...but, that's what doing a superb show is about (in part anyhow) sometimes...

I'm keeping alittle tally sheet on copy, calls, etc...will include a "billing" in the next communique.

Looking forward to the copy you're making me of whatever this "ARS ELECTONICA" reality is about...please keep me updated.

Whoopee...more later...

LOVE:

Phil Morton
Box 987
West Yellowstone, MT   59758

(406) 646-7519

17 March 1992

Dear Woody and Steina:

Finally got my (non) Income Tax junk out and off to my tax-man.
The College (Gene) requested a bunch of stuff which took some
time last week, and a couple of other things have accrued to
put me abit behind in getting this stuff to you...so, I'm getting
nervous now! The scale and complexity of this gig has taken on
some real proportion now as well as my poverty. So I have created
a Preliminary BUDGET ESTIMATE with a 50% Advance request due by
April 20, 1992. I realize this has a kind of hard-core business
flavor about it being so date-dead-line and dollars specific, but,
   there is just no way I can do this without real-dollars and
scheduling real-time. I am so dollars-poor that if the 50% Advance
fails I must bail-out and take a local labor job here to get some
survival/moving dollars to move to some teaching job (hopefully
Santa Fe) somewhere; got many applications out there... I am not
exaggerating my poverty; haven't moved my truck for two months,
no gas money...more than 2 months, since before X'mas time.

So, have a look at the enclosed written descriptions, sketch, and
block diagram of the set-up. Please let me know what you think
as soon as possible. I've tried to impress accurately the size
of this undertaking so if it's necessary to scale-down you could
let me know immediately. As is, it necessitates me being there
on site all the time to keep the system swirling! A strenuous
effort day-after-day for sure, but **I LIKE IP-ing**!!! Particularly
for an audience!

Have not gotten into my old tapes yet to see what's relevant, nor
gotten photographer to photograph IP set-up and me here yet ...
will soon.

Still looking for copy of whatever this "ARS ELECTRONICA" thing
is about...remember I'm totally in the dark about what we're
trying to do and for WHO?

Regarding the BUDGET ESTIMATE: if they wonder about the $ amount,
you might remind them that there is NO CHARGE for any programming
or artistic asethetic work (which is obviously going to be MUCH
work) and NO CHARGE for rental (use) of all my equipment including
the IP (the IP with operator rents for $300.00 a day in my studio).

Notice that the Equipment lists are "...(**tentative!**). Don't send
to Austria as "final specs". If this whole thing is a GO AHEAD,
I will spec the needed equipment from Austria more precisely after
I test-out **the patch-program** in total complexity on IP...might need
to have the bank of 3 (or 4) b/w monitors be external syncable, as
well as the underscan monitor, etc...

So...please review everything enclosed as soon as possible and clarify these big unknowns for me:

1) Is this scale and complexity of the IP presentation a GO AHEAD for sure? Or do we need to scale down?

2) Is there any problem with the 50% Advance needed? If not, can it come sooner? I can't pay shipping, etc. on needed stuff (modules, XYZ scope, etc.) to begin total system test-out until real-dollars come.

3) Copy of whatever, whoever, this "ARS ELECTRONICA" thing is about...?

So much for now...call soon!

LOVE:

Phil Morton
Box 987
West Yellowstone, MT   59758

(406) 646-7519

The GENERAL IDEA for the **IMAGE PROCESSOR** presentation set-up:

        The general idea is to show 3 functional uses of the instru-
ment as compared to a use. Three parallel process_{es}on-going through
the instrument instead of just one process. I've chosen the 3 most
diverse uses (or processes) for presentation. Indeed the patch
program is **immense**, a carnival of cabling hanging-off the front
of the IP which is unprecedented! **Art** ya'know. The IP instru-
ment itself is too, immense, the largest ever built - and for
this presentation, the greatest complexity of modules ever
assembled into one whole instrument.

        The sheer expanse of the entire system set-up necessitates
a physical space of about 30 feet by 15 feet minimum. I suggest
a dedicated whole room of about that size. Dark space with no
ambiant light, no windows (unless totally blacked out by drapes).
The space will be lit by video monitor light only. I suggest an
open table with a few chairs around it for making people feel
comfortable about sitting down and just gazing about as the social
energy comes-and-goes in the space; smoking is okay with me in
the space if there's adequate ventilation (ceiling sucking-out)
currents. The impact of the presentation is environmental/social
at one level, and at another level very individual (alone) when
one sits and interacts with the "controls"*at one of the display
stations (4 in total) - your LASER DISC w/bar-code STATION...(1)
                       - the LIVE CAMERAS WITH FEEDBACK and
                             OSCILLATORS STATION...(2)
                       - the RASTER GRAPHICS STATION...(3)
                       - the COLOR TAPE RE-PROCESSING STATION...(4)
See the sketch of space for a "bird's-eye-view" of how I'm currently
imagining it.

        They (Austria) would need to provide some tables and chairs.
The most crucial is a "custom" base platform of sorts for the
IMAGE PROCESSOR itself: about a 4 feet by 8 feet surface, about
1½ to 2 feet high off floor (this height is extremely critical!).
At 2 feet high the top of the IP is at 7 (seven) feet! The weight
load this platform needs to hold is 300 - 400 pounds. A 4 by 8
sheet of 1" plywood with ten cement blocks would work.

----

* Consistantly pictured are 2 joysticks at each display station.
One joystick may be a push-button passive switcher (6 inputs max.)
if **the patch-program** proves more work-able that way...(?)

LIVE CAMERAS WITH FEEDBACK CAMERA and OSCILLATORS DISPLAY:

      The key interest being demonstrated here is multiple camera
inputs of black-and-white being processed into various color
processed complexities. Two of the cameras are imaging from
crisp clear photographs (well lighted); the third camera is
"doing feedback" - a trick camera I've modified with switches
on the X and Y yoke axis so that all 4 permutations of the
raster geometry can be fedback = the most extraordinary (and
stable!) modes of feedback possible. The two joysticks are
available for stirring around through various inputs (cameras
and oscillator patterns) and through various radical color
processed modes (amplitude-classifier/differentiator/function
generator/comparator/etc. modules). The cameras are not avail-
able for people to manipulate, only see (prove) where images
are coming from.

      The monitor in front of the joystick player is a big color
monitor, on top of which is a bank of 3 (or 4) small black-and-
white monitors for displaying the live input pictures.

      They (Austria) will need to provide:

- a monochrome underscan monitor for feedback loop
- a bank of 3 (or 4) small black-and-white monitors
- a big (25" ?) color monitor

RASTER GRAPHICS DISPLAY STATION:

      The key interest being demonstrated here is the multiple
manipulations possible on the video raster. The flip-flopping
and scalar serendipity of the X and Y axis and Z axis (normal
video picture information) being extrapolated into 3 dimensional
"peaks and valleys" play... The display picture on the Hewlett-
Packard XYZ scope is of course monochrome. The two joysticks
enable choice of what's modulating on the Z axis (camera, oscil-
lators, or tape [RUTTIN' BUFFLER] input) and give slight interaction
with the X and Y axis extremes which are mainly controlled by
a cyclical permutating oscillators' patch-program from the IP.

      I'll have to ship in an XYZ scope from someone as I do not
have one myself here in the studio.

      Nothing special needed from them (Austria).

COLOR TAPE RE-PROCESSING DISPLAY STATION:

The key interest being demonstrated is the audio signals
from tape are interacting with the video picture, mainly expanding
and contracting the 'key-level' which is $\pm$ the physical shape con-
tour of buffalo bodies. The audio is the buffalo's voice(s) roar-
ing and grunting. The louder the roar, the bigger the 'key-hole'
through which one sees a synthetic pattern-reality. Outside the
'key-hole' one sees a slightly color processed yet recognizable
environmental field close to what the non-processed color tape
input looks like. Two joysticks (4 $\pm$ dimensions) are available
to stir-around and interact with the re-processed domains, the
inner synthetic pattern-reality and the outter color processed
field.

The upper color monitor displays the non-processed input
tape with stereo sound so people standing around can see it easily
over the head of the seated interactive joystick player. The
lower color monitor is displaying the re-processed (psychedelic-
fer-sure) version the player is stirring-around...

The input tape is **RUTTIN' BUFFLER** (15 minutes in length)
which I consider the finest documentary (straight) tape I have
ever done. As an aural and visual "hit" it's completely pure:
BISON, BISON, BISON. No music, no narration, no special effects;
nothing but the sights (behaviour) and the incredible surrounding
sounds (voices) of wild buffalo during the peak of the rut (the
breeding season) in the remote Yellowstone wilderness. All by
itself it'll **stop** people in their tracks - anywhere! No English
to Austrian language translator needed to grasp the message being
communicated here - everyone <u>loves</u> animals ya'know! I'll need to
assemble 4 cycles of this 15 minute "hit" onto one 60 minute 3/4"
U-matic tape for input, plus a same for back-up of course.

They (Austria) will need to provide 2 stackable same color
monitors and a 3/4" U-matic (VO-5850 or better) <u>editer</u>, and a
stereo pre-amp/amp with stereo speakers unless one of the monitors
has ear-like stereo speakers and a built-in audio amplifier for
line-level audio inputs (like a KV-25XBR from Sony).

Equipment we'll need to ship to Austria: ...(tentative!)

4 separate - tiers of IP modules, each is 14" x 17" x 47" and
  takes 2 people to handle a tier...
1 IP output-mixer, 8" x 14" x 40" approx.
1 Dual-trace oscilloscope
1 XYZ display scope
1 waveform monitor
2 TM-22U color video monitors (5")
3 black-and-white cameras
3 small tripods
4 small lights
1 carton of back-up IP modules...
1 carton of misc: color bar/sync generator, switchers, joysticks...
1 carton of many-many-many cables, power blocks, ext. cords, etc...

? more...

Equipment Austria will need to provide us: ...(tentative!)

2 stackable (same) color monitors, KV-25XBR SONY (25") for example...
1 3/4" U-matic (VO-5850 or better) editer recorder/player...
1 pre-amp/amp with stereo speakers...

1 monochrome underscan monitor for feedback loop...
1 bank of 3 (or 4) small black-and-white monitors...
1 big (25" ?) color monitor...

1 "custom" base platform for IP (see description)
2-3 tables and chairs

1 30 feet x 15 feet presentation space...

? more...

Five or six AIR FREIGHT SHIPPING BOXES will need built. The
existing IP case(s) will fit snuggly
inside. The existing IP cases can
not take the slam-bam of unpredict-
able shipping punishment. As is,
each is a 2 person lift, due
to bulk not weight.

17"

47"

14"

(existing IP case)

9½"

(LID)

(AIR FREIGHT SHIPPING BOX)
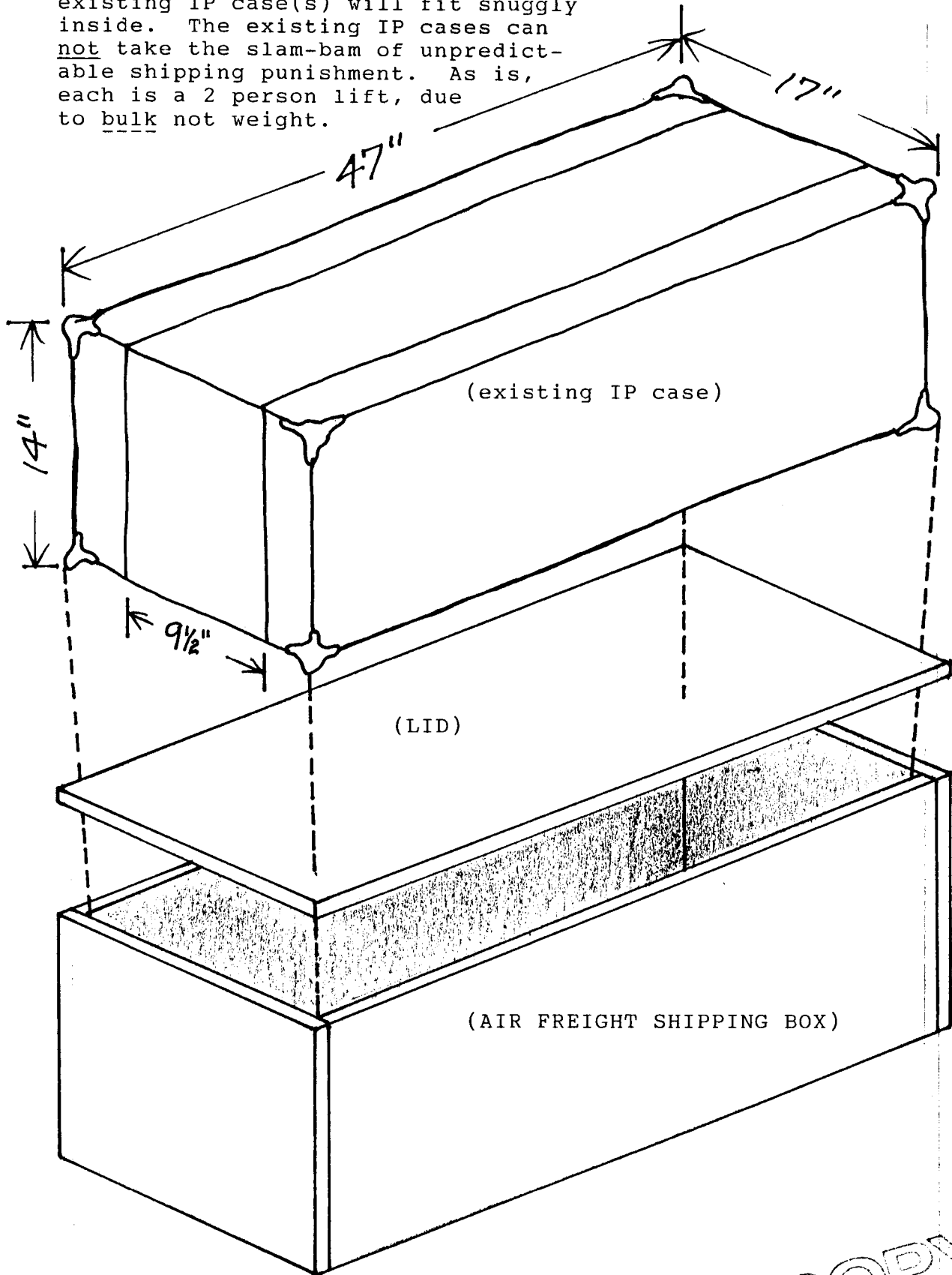
<u>Preliminary BUDGET ESTIMATE</u>:

Labor:

```
4 weeks (30 days) on site @ $150./day..................  4,500.00
1 week prep/packing in USA @ $150./day.................  1,050.00
1 week prep/unpack in USA @ $150./day..................  1,050.00
                                                        _____

Labor sub-total.......................................  6,600.00

Shipping, trucking, packaging, misc. in USA...........  1,000.00
(Insurance, repair of breakage, etc.)
                                                        _____

Total estimate (minimum)..............................  7,600.00
```

Assumptions: more or less labor days will be added or subtracted
               based on $150.00 per day. <u>No</u> <u>charge</u> for any pro-
               gramming or aesthetic work here in my USA studio
               in preparation for the event.

               Equipment shipping to Austria and return from
               Austria will be paid for by them (Austria).

               Airfares, bus/taxi fares to and from Austria
               site to be paid for by them (Austria).

               Sleeping room and food while on site to
               be paid for by them (Austria).

               50% Advance ($3,800.00) on above estimate before
               April 20, 1992. If for any reason the 50% Advance
               is not in my hand by April 30, 1992, I will cancel
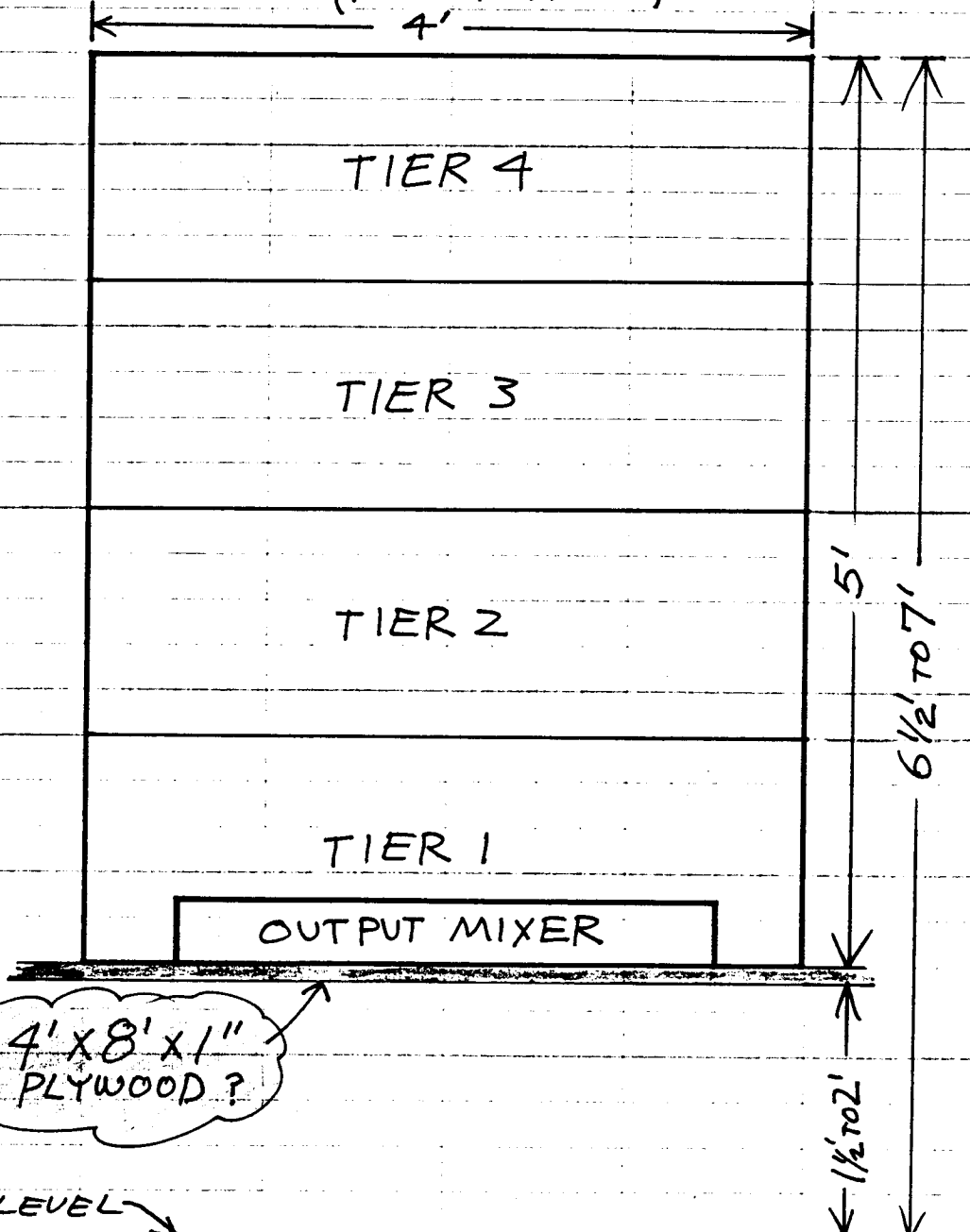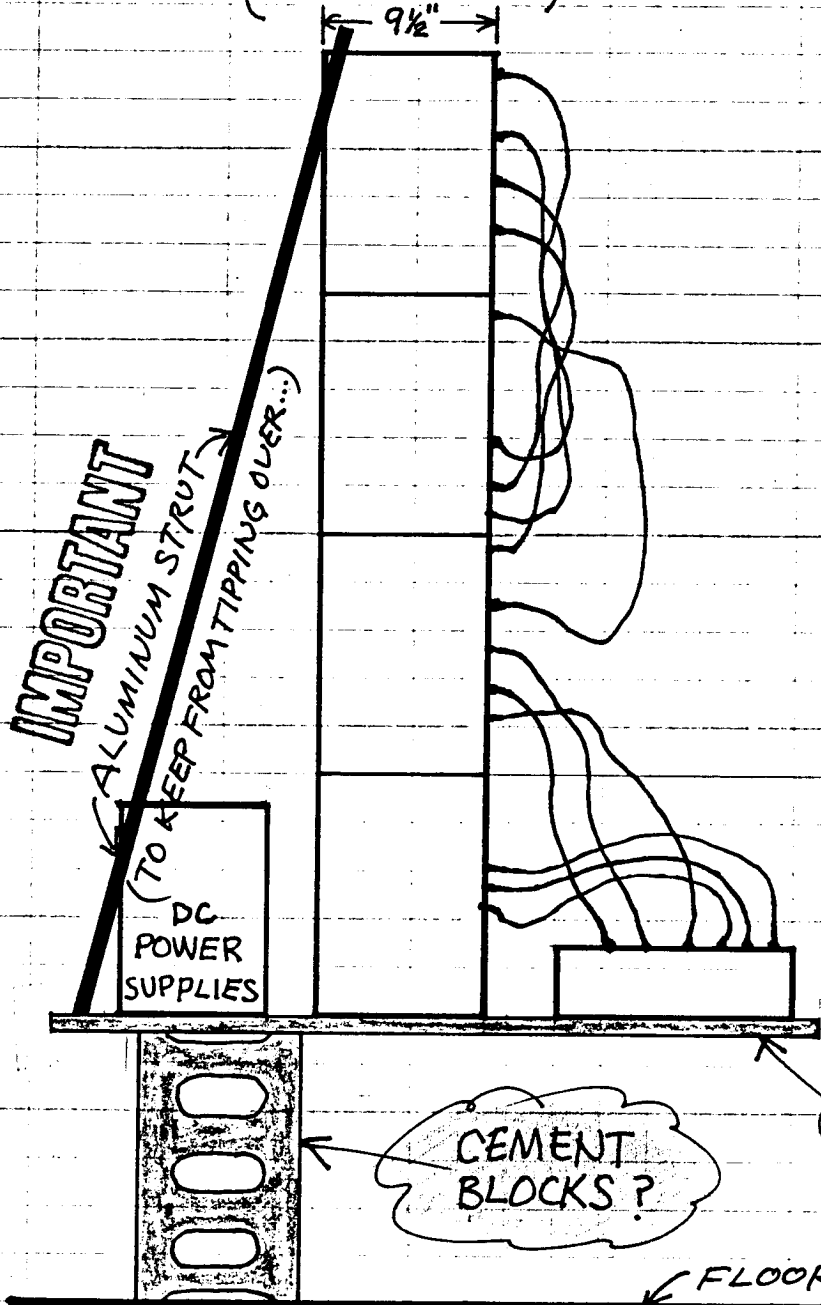   all and any involvement with the event.

17 March 1992   _____

                 Phil Morton

(SIDE VIEW)

(FRONT VIEW)

9½"

4'

IMPORTANT

(ALUMINUM STRUT →)

(TO KEEP FROM TIPPING OVER...)

TIER 4

TIER 3

TIER 2

5'

6½' TO 7'

DC
POWER
SUPPLIES

TIER 1

OUTPUT MIXER

4'X8'X1"
PLYWOOD ?

CEMENT
BLOCKS ?

1½' TO 2'

FLOOR   LEVEL

SCALE : ☐ = 3"

COPY

(feedback loop)

PHOTO.......

PHOTO.......

IMAGE PROCESSOR

col.

WFM

col.

DT

SWITCHER

CB/SYNC

OUTPUT MIXER

b/w   b/w   b/w

3/4"
U-matic

col.

XYZ

L.   col.   R.

col.

(joysticks)

(joysticks)

(joysticks)

LIVE CAMERAS WITH FEEDBACK
and OSCIILATORS STATION

RASTER GRAPHICS STATION

COLOR TAPE RE-PROCESSING STATION

30'

(BACK WALL)

(STORAGE)

(STORAGE)

4'

8'

UNDER SCAN
MONITOR

WFM
DT   COL.
      COL.

"CUSTOM"
PLATFORM

SWITCH.

IMAGE PROCESSOR

CB/SYNC

4'

3/4"
U-matic

OUTPUT MIXER

PHOTOS
W/LIGHTS

TABLE

TABLE

7'

XYZ

FEEDBACK
CAMERA

COL.
B/W B/W B/W

CHAIR
RASTER GRAPHICS...

L.
COL.
COL.

TABLE

CHAIR

(?)

15'

CHAIR
LIVE CAMERAS
WITH FEEDBACK
AND OSCILLATORS...
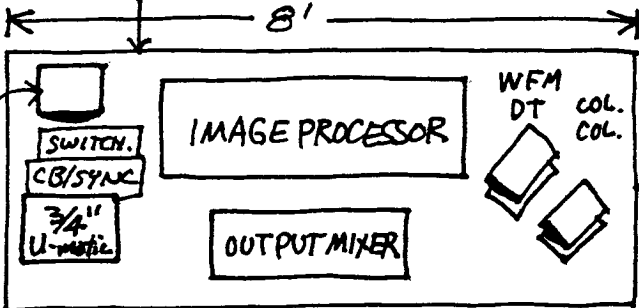
CHAIR
LASER DISC
W/BAR CODE...

CHAIR
COLOR TAPE
RE-PROCESSING...

3'

(EMPTY
TABLE)?

(LOUNGE
CHAIRS?)

COPY