

CONFIDENTIAL

TANK

Review #3.0
Tuesday, Nov 2, 1993

DIST:

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MEETING AGENDA

- 2:00 - VIEW GAME IN LAB
- 2:15 - SUMMARY OF PROGRESS TO DATE
 - FUTURE PLANS
- 3:00 - QUESTIONS & ANSWERS
- 3:30 - FREE FORMAT (BRAINSTORMING)

PROGRESS TO DATE:

The primary objective of this review was to implement networked gameplay. Although it took longer than expected, this goal has now been accomplished. Progress on the sub-goals is as follows...

layout of subsequent waves

While we have laid out two solo waves and three head-to-head waves, we are far from finished. On the other hand, we now have Matthew Ford on the team as our dedicated game designer. Wave designs are now his primary task and, given Matthew's progress in the short time since he's joined us, I'm confident that the wave designs will be completed on time.

cabinet design finalized, prototype cabinet constructed

While a prototype cabinet was in fact designed and constructed, I believe that a redesign will be necessary to a) minimize the footprint and b) increase the feeling of closure to the player. Although ID has been kept very busy with the other products in the company, I believe we still have sufficient time for a redesign. In the meantime, we have learned quite a lot from our existing prototype cabinet.

implement remaining badguy tanks, incl. weaponry

All but one of the tank models have been shot and all but two are in the game. As for weaponry, we still have quite a ways to go. Due to a design change (we suspect that all of the goodguy tanks should be hovertanks), two of the goodguy tanks will probably have to be redone. On the positive side, we don't believe that any further models will have to be commissioned. Our 3D expert (Brian LaFrance - joins 11/15) recently built a polygon version of our existing hovertank entirely out of polygons. It looks great and, with fairly painless modifications, we can create the additional two hovertanks with this method. No cleanup should be needed.

implement remaining two control panels

Bad news. We still haven't even finalized the first control panel. We will really need to concentrate on the control panels (and HUD graphics) in the immediate future.

implement remaining enemy structures

The remaining enemy structures are NOT implemented. But we have spent quite a bit of time experimenting with different graphics generation approaches (models, 3D renderings) and now have a plan. Due to impending design changes in the game itself, I suspect we won't need near as many alien structures as we originally thought. Those we do need will be created using the 3D rendering techniques (a very painless approach).

final weapon effect graphics

Our progress on the weapon effect graphics has been minimal. Much work remains. We have made fairly good progress on explosion and damage effects however.

Although not explicitly stated, we has also hoped to have QUAD audio completed. We will have QUAD in time for the focus, but not for this review.

In summary, the last four months have been somewhat rocky. We lost our lead animator, we added a game designer and are adding an additional animator (Brian LaFance) shortly. Some time was also lost as the team considered the ramifications of a LBE version. It should be understood that it's much easier to 'ignore' the LBE idea officially than it is in practice. Are we on schedule? While I believe that we will make our current FGA (ignoring LBE), I have not had time to fully review the schedule. All available time has gone into our upcoming focus. After the focus, I will regroup and give the schedule a reality check.

There is a very significant development in the works worth noting in regards to the game design. We are considering very strongly moving towards an entirely head-to-head structure, eliminating the solo waves as they now exist. The current design is somewhat schizophrenic, requiring us to design two very different games in the guise of one. This makes the effort of programming and game design considerably more difficult than is necessary. Instead all waves would be head-to-head with the CPU controlling any unused tanks. The current badguys would be relegated to the secondary functions of background interference and sub-goals (possibly more significant in bonus waves). The player will take on the role of a mercenary tank commander, out only for himself. The goal is to see who can chalk up the most kill points. It's worth noting that this shift in emphasis towards all head-to-head play would also be closer to what we would do with an LBE version. We will defer the final decision until after the focus.

Last of all, it should be officially noted that we are no longer planning to convert to POLKA. This is due primary to inconsistent schedules. Instead, we will be switching to a faster 68020 on the existing hardware. This will be much easier from a software standpoint.

COST ESTIMATE - DOUBLE SITDOWN

11/1/93

Description	Unit Cost	Total
ELECTRONICS		
GT PCB (includes security)	2 x 465.00	930.00
JAMMA filter PCB (if needed)	2 x 10.39	20.78
COMM PCB	2 x 30.00	60.00
CAGE PCB	2 x 99.00	198.00
QUAD Amplifier		25.00
		1233.78

ROMS		
Program: 1Mx8-100nS	4 x 2.60	10.40
MOB: 4Mx8-100nS	20 x 9.50	190.00
PF: 4Mx8-100nS	3 x 9.50	28.50
Alpha: 1Mx8-150nS	1 x 2.60	2.60
Audio: 4Mx8-100 nS	1 x 9.50	9.50
4Mx16-120 nS	4 x 18.00	72.00
	subt	313.00
Two sets needed	2 x	626.00

Masked ROM's Calculation:	
	10.40
10 x 7.50	75.00
1 x 7.50	7.50
	2.60
4 x 10.00	40.00
subt	135.50
2 x	271.00
Masked Roms one-time cost:	
	\$67,500
Number of units to breakeven:	
	190

ELECTRICAL		
Power Supply		92.00
Power Distribution PCB		18.58
Display (Wells, 25")	2 x 318.00	636.00
JAMMA Filter PCBs	2 x 11.50	23.00
PCB ground plane and hat assy.		40.00
AC/DC Power and video harness		50.00
IEC 3xxx cord/switch/fuse module		15.00
Cabinet lights & circuitry (ambient & strobe)	2 x 30.00	60.00
Control harness		24.00
		958.58

COIN SYSTEM		
Coin door, coin counter,		
cash box & coin box encl. (4 wide)	1 x 87.64	87.64

CABINET		
Wood, cabinet + attract panel		500.00
Plastic seats (2)	2 x 60.00	120.00
Seat pedestals	2 x 20.00	40.00
Vendor Kit (casters, glide plates, fan grill, locks, side decals)		60.00
Shield	2 x 7.00	14.00
Speakers (4-4", 2-8") + Grilles	6 x 7.50	45.00
Fluorescent light		12.00
Formed dash, monitor bezel, or attraction part	2 x 50.00	100.00
		891.00

CONTROL PANEL ASSEMBLY		
Control Panel w/ Hinge		21.00
Decal		7.00
Analog Joysticks	2 x 50.00	100.00
Button assemblies	5 x 1.00	5.00
Draw latches	4 x 1.25	5.00
		138.00
Two assys needed	2 x 138.00	276.00

OTHER		
Shipping Container		128.00
Labels, manuals, bags, &c.		5.65
Misc. Hardware		10.00
Reserve for Missing Parts		10.00
		153.65

TOTAL MATERIALS COST 4226.65

3871.65

LABOR		
PCB (GT, COMM, CAGE)	4.1 x 8.57	35.14
Sub and Final Labor	4.5 x 5.89	26.51
SUBTOTAL		61.64
Overhead (mate x 21%)		900.54

w/ Masked Roms

FULLY ABSORBED COST: \$5,189

\$4,759

DISTRIBUTOR COST AT MARGIN OF:

35%	\$7,983
40%	\$8,648
45%	\$9,434

\$7,322
\$7,932
\$8,653

SCHEDULE

1st REVIEW: APRIL 1, 1993

GOAL: emulate Battlezone in functionality
demonstrate graphic look (less translucency effects)
prototype GT
present cabinet design proposal
storyboards for Attract, Coin-up, & Segues

2nd REVIEW: JULY 1, 1993

GOAL: implement one complete wave
conversion from GX2 to GT
preliminary CAGE audio
fully implement one goodguy tank, incl. weapon
fully implement one control panel
3+ badguy tanks implemented
enemy structures (1 radar dish)
implement 'contained' worlds
three rocks in final graphics

3rd REVIEW: OCT 1, 1993

GOAL: implement new
layout of
cabinet
improve cabinet constructed
improve tanks, incl. weaponry
control panels
enemy structures
graphics

This schedule has not been updated since the last review. It will be updated after the focus...

long term field testing
Attract, Coin-up, & segues implemented
Finale implemented
remaining FX implemented (force fields, infrared view, missile POV)
OS (including stats) completed

GRAPHIC RELEASE: MAR 1, 1994

PROGRAM RELEASE MAY 27, 1994

GOAL: game completed
all tuning completed
security implemented