

Final 1

GRAND ALLIANCE WASHINGTON DEMO - FALL 1994

Screen

Script

Interface Section

GA Graphic

Shots of Rocky mountains fading up from black, Interspersed with white messages on black background also fading from Black. Music Enya (Approx :30) (This is similar to NIST Demo)

(Messages: GA HDTV, Superb Picture, Dynamic Sound, Digital Transmission, New Services, Coming Soon)

Dome baseball opening with dynamic upbeat music.(Approx:45) Changes to mountains, Music fades to allow VO (Approx 1:30)

Digital High Definition Television (Pause)-- The world's highest quality broadcast picture and sound (Pause) that's what the Grand Alliance HDTV system will deliver to millions of homes across North America.

GA Digital HDTV Graphic

Use shock wave from Star Trek, first shown on NTSC projector, then HD projector

Let's look at some of the benefits of Grand Alliance HDTV technology. What you're watching now is today's NTSC television showing a dramatic scene from Star Trek VI. For many of us, Star Trek was our first glimpse at the promise of the information-age "explosion".

Now watch the same scene again --but in Digital High Definition -- as the stunning quality of six digital sound channels surrounds you.

Roller Coaster

HDTV presents the consumer with a sharper picture and more of it -- a full, wide-screen image -- as opposed to the smaller sized picture received on today's NTSC television. HDTV will bring the fun and thrill of a 'theater-in-the-home' experience to American viewers.

(Audio through Proj Switch)

Progressive Section

(Approx 5-10 Secs of Picture + music.)

Music fades under VO

Use still life and fox scene on both NTSC and HD projectors

NTSC has noise + Ghost added

Grand Alliance HDTV goes far beyond these improvements, and offers other major enhancements to picture quality -- like eliminating the 'snow', ghosting and other interference that can often be seen in a NTSC picture.

today's analog

Contrast that with the brilliant High Definition images that are delivered by the precision of computer-like all-digital transmission.

Screen

VO over music

Interlace Section

GA Graphic (NII Graphic?)

Dome baseball with channel guide
superimposed

Baseball clip-
- scanning through player stats in
window, etc. as VO explains

Indy Tennis scene (Becker vs
Courier) and alternate NTSC
camera angles in window (:45)

Script

Not only is Grand Alliance HDTV immune to these types of problems, but it also transmits five times the amount of picture information. This means dramatically sharper images on a large screen, while the NTSC quality suffers severely.

But big bold pictures, and sound you can feel, are not the only advantages.

HDTV's digital data stream can help television broadcasters become a key delivery mechanism of the National Information Infrastructure. Viewers can then utilize the wide variety of services available through, the so called 'information super highway'

Now let's look at a sample of the program enhancements that any broadcasters could deliver. An auxiliary data stream transmitted along with the High Definition picture, could contain a complete program guide -- available at the touch of a button.

Viewers will be able to check scores or look up the players statistics whenever they choose. Using the remote control, you can scan through pictures in a pop-up window, select your favorite player, and then get 'up to the minute' statistics.

Or, imagine being the director, and calling the shots. You could choose to watch different camera angles in the pop-up window, just like this.

Screen

GA. Download logo for 3 seconds
(With moving fill bar)

Graphic of phone book

Still of musicians, PCs, books,
and/or CDs

Map of best traffic route info over
with text of traffic conditions.

Timetable Graphic
Tape machine shot?
(1992 First Phase Testing Comp
1993 GA Formed
1994 GA System Design + Build
1995 Testing Comp + FCC STD
1996 Available To Consumer)

Washington Scenes including the
Smithsonian.

Grand Alliance HDTV graphic.
Company Logos.

Script

But now, let's pause for a word from our sponsors (show GA. logo for 3 seconds with following VO) -- "Thank you for watching Grand Alliance HDTV" -- Now back to the program.

During that three second break, six million bytes of data containing all kinds of program enhancements and information services, would have been transmitted to your home. Six million bytes of data is large enough to contain the entire Manhattan telephone directory.

So you could receive digitally compressed music CDs, software, or even books or educational coursework.

Imagine having the ability to receive customized traffic information through your HDTV set, or even on your personal digital assistant - in other words, the best route to work today.

This technology is impressive, but what is the process to bring this service to the market and when's it going to happen?

In 1992, the FCC completed rigorous competitive testing of HDTV systems. In 1993, having proved themselves to be worldwide leaders in HDTV technology, the successful finalists joined forces to create the Digital HDTV Grand Alliance. This allowed the finest elements from the competitive phase to be integrated into a "best of the best" system.

If everything goes as planned, the HDTV standard could be set in 1995, ensuring the United States will continue to lead the world in HDTV broadcast technology. High Definition TV's to be available to the consumer as early as 1996.

Breathtaking pictures and sounds are enough to make digital HDTV successful in its own right. . .but HDTV opens up so many more horizons. The US HDTV standard will empower broadcasters and viewers to be more than bystanders on the Information Super Highway -- it will enable them to be major players in building and using the evolving National Information Infrastructure.

Move to alternate room with direct view monitors

PART 2

Washington, DC clips including Smithsonian (again)

HDTV's digital transmission and high resolution pictures will allow Broadcasters, Cable TV operators, Telephone companies and Direct Broadcast Satellite operators, to deliver a wide variety of services including interactive applications to HDTV sets, personal computers and other new information appliances.

Graphic shows packetization of data and Aux data stream

The key to the tremendous flexibility inherent in the Grand Alliance HDTV system, is it's ability to send different types of information or data to the home. This is possible because digital data is organized into packets of information, each with it's own description of contents.

Red packets represent video data and green packets are audio data. The yellow packets depict the significant amount of auxiliary data information which can be sent. The mix of packets can be varied to provide any combination of services.

Progressive Section

Show browse of Internet in window over HDTV footage or still

The Grand Alliance HDTV system's sophisticated digital technology provides a powerful basis for new, highly-interactive, two-way information services that can be delivered over cable TV, or fiber like these services from the Internet you are seeing here.

Graphic of server linked to home with movie icon button.

Video-on-demand is another of many, new services that are just around the corner. Movies can be stored on computers -- and sent directly to your home -whenever you want them -via cable or telephone company providers.

Show clip of Airplane scene as example of movie

Shots of Internet satellite map, with city icons (NYC, San Diego, Chicago, etc.); click on city icon and bring to full screen; Show picture of city with weather info on screen

For another example, let's start with this satellite view of the United States available over the Internet. With city and weather information added, you can browse through the map, click on your destination, and find out more about the weather, transportation, or even local restaurants.

Show still shots (houses, living rooms or kitchens)

Home shopping takes on a whole new meaning when it becomes highly interactive. You will actually browse through clothes racks, or steer though an open house when shopping for a new home, from the comfort of your favorite armchair

Screen

Interlace Section

Clinton Inauguration clip with VO; still frame at end and show test question with multiple choice answer buttons; correct answer goes to next clip.

Short zoo clip with question and multiple choice answer buttons

Microscope + Cam Shot

Show medical image

3 Monuments + U.S. flags

Script

Other possibilities abound. As part of the National Information Infrastructure, HDTV technology can make interactive multimedia education available to homes throughout North America. Here, we see the images and hear the sound of history in the making. (pause for sound bite of Clinton)

The high quality pictures and sound make it a lot more fun to test our knowledge of an event while we learn. This medium will have far reaching implications for Education in America.

Interactive vocational training can be available at home, or in the workplace.

HDTV's high resolution and superb color fidelity are also perfectly suited for many medical applications such as Remote consultation. By sending medical images and patient data over a network, rural clinics could access digital libraries or obtain advice from specialists, in order to help perform cost efficient diagnosis remotely.

CONCLUSION

High definition television will play a key role in the swiftly-advancing all-digital information era. Rapidly establishing a US HDTV standard will mark an important step in improving the evolving National Information Infrastructure and will underline America's international leadership in these technologies.

The innovation in interactive services and products that will result, will translate into jobs and export opportunities.

Screen

Script

Satellite

We're looking at a window on a new world of digitized entertainment, communications and data -- delivered over the airwaves, cable, fiber and satellite.

Concorde

In the not-too-distant future, digital HDTV sets and the personal computer will complement each other, multiplying the power of both technologies.

Music Dome

Grand Alliance HDTV approach offers the world's highest quality broadcast system and allows new services to be introduced quickly and easily. HDTV represents a quantum leap in improving the US television service, and is a key enabling technology driving the evolution of the National Information Infrastructure

Fireworks

With

GA + Company Logos

Grand Alliance HDTV is the future of television.

FAX

To:

Robert Graves	AT+T 908 221 8484
John Kasle	Philips 212 850 7342
Karen Kane	GI 312 541 5019

From: Ray Lowe - David Sarnoff Research Center

Date: 23 September, 1994

Pages To Follow: 6

This is the final version. If anyone has a major problem they should call me at (201) 812 8962 after 6:30 EST

The Voice over will be recorded on Saturday and rough cut edit should be complete by COB Thursday 29 September. A VHS copy will be Fed Exd to you for your review by Friday 30.

Regards