As a collaborative effort involving various content producers, editors, directors, and Deep Dish, the different episodes of *Shocking and Awful* are organized by different individual logics. In the absence of a system-wide organization scheme, Deep Dish faces three problems: incongruent object labeling, missing documentation and, more than likely, disparities in timecode data between the tapes and digital files. The aim of this document is to provide Deep Dish with suggestions for managing the elements from one episode, "The Art of Resistance," for preservation, and to provide practical suggestions Deep Dish can implement during the production stage in future projects to alleviate some of the difficulty of archiving digital content.

**Contents of the archive**

The archive for *Shocking and Awful* includes a cardboard box of tapes, primarily MiniDV, and two external hard drives containing files in a variety of formats. In general, the tapes include original source materials, episode masters, and dub masters.

**Tapes**

A) Originals

Deep Dish retains dozens of original Mini DV source tapes, interviews and events shot in the field by various filmmakers. A different coordinating producer managed each episode of the show. While most of the video was edited in DD's office, some editors worked offsite and delivered their edited work rather than the camera originals. In some instances, edit master tapes or digital files are the earliest media generation of some of the content held at Deep Dish.

B) Masters and Dub Masters:
A few boxes within the tape archive are labeled "Shocking and Awful Masters." Three tapes are labeled as Masters for "The Art of Resistance." These are likely different version masters (original master, NTSC/PAL broadcast versions, etc) and should be labeled accordingly. The dub masters for this episode are missing from Deep Dish's tape archive. Ideally the original masters would be stored for preservation, and the dub master would be used to create copies as necessary.

**Digital Files**

Deep Dish should make a thorough analysis of what is necessary to keep and what files are duplicates using Final Cut Pro's Media Manage tool. According to Deep Dish staff, all the files for the show are found on two external LaCie hard drives, labeled "Shocking and Awful Archive 1" and "Shocking and Awful Archive 2." The drives are not backed up and each contains different project elements from the Shocking and Awful series.

The files on DRIVE 1 pertaining to the Shocking and Awful episode "The Art of Resistance" include:

- "Art of Resistance" folder- contains one FCP file (332KB, dated March 2006) and a "Scratch" folder containing 3 Quicktime files
- "FOR YOUTUBE" folder containing proxies for web streaming

The files on drive 2 include all the rest of the project files.

- Project files for Art of Resistance (AIFC Audio files, QuickTime moives, Final Cut Pro Movie files)
- Graphics files (Adobe Illustrator)
- Still Photo Images (Photoshop files, Apple PICT files, .TIFF and .JPEG)
- Intertitles (Microsoft Word files, Quicktime movies)
- Render Files (Final Cut Pro Movie files)
- Waveform Cache files (Quicktime movies)
- S&A DVD Authoring files (Adobe Photoshop image files, DVD Studio Pro Project files, Final Cut Pro Project files, Avid files, AIFF Audio files, MPEG-2 files)

**Organization**

The absence of a clear and consistent labeling system makes it difficult to determine which tapes and digital files correspond to particular episodes. Most of the tapes seem
to have been labeled by the filmmakers or camerapersons, usually a one-word content description. These labels generally include information about location, event or date, but rarely all three. The labels on the digital files are labeled and organized in various ways. Within each episode, the coordinating producer used his or her own organization scheme within Final Cut Pro to edit and assemble each segment. Elsewhere on the hard drives, the Final Cut files are organized by individual post-production projects (such as DVD authoring) for the entire show.

The Final Cut Pro manual provides some basic guidelines for archiving digital projects created with the software.\textsuperscript{1} It is important to save the project file and the original source tape. In this case it is important to ensure an accurate timecode relationship between the source tapes and the project clips. If the project files and original source tapes are retained, captured media files which are simply copies of the original tapes, can be discarded. Small project files can be saved on a Zip disk or CD-ROM. Media files without timecode, such as Adobe Illustrator files, Photoshop images, and Motion graphics should be archived on a hard disk or DVD-ROM and backed up elsewhere. Non-timecoded audio and video sources such as VHS tape and CD audio should also be retained and backed up.

Breaks in timecode on the Mini DV tapes may complicate the issue of recapturing, and will make rebuilding the show from the original materials very difficult. In the "recommendations" section, this report offers some suggestions for actions Deep Dish can take during the production stage in future projects to avoid timecode problems. Lastly, the quantity of tapes, compared to the quantity and size of the digital files on the hard drives, demonstrates that only a small fraction of the content of these tapes were captured as digital files. For this reason, the original tapes donated by the various

\textsuperscript{1} Final Cut Pro 6 User Manual, Volume 4, p. 23-24.
content producers should be considered documentary outtakes, valuable archival materials.

**Physical condition and storage**

Overall, the tapes appear to be in good condition. A few tapes are missing boxes and should be re-housed, but overall there is no evident decomposition or mechanical damage. However, the Deep Dish office is a poor place to store archival materials. Magnetic tapes will decompose when exposed to fluctuations in temperature and humidity, and air pollutants also react with the oxide coating of the tapes, causing them to break down. If they are not stored in a climate-controlled environment, the life expectancy of magnetic tapes is only about ten years. Furthermore, it is a good idea to distribute archival copies over multiple locations in the case of fire, flood or other disasters.

It is unlikely that Deep Dish can afford its own climate-controlled offsite storage. Depending on the priorities of your organization, a viable option may be donation to the Witness media archive. Witness is a nonprofit archive and media collective with an institutional mission to preserve politically sensitive material pertaining to human rights issues. As a work of independent journalism about the war, *Shocking and Awful* fits well within Witness’ collecting policy. Witness is nonprofit, has a climate-controlled storage environment, employs professional catalogers to populate its database. One “pros” of donating to Witness might be increased visibility for Deep Dish. Another is having safe location for long-term preservation. A major drawback to donating material to Witness is that the archive will probably ask Deep Dish to relinquish all rights to the materials and may license the footage.