DSLR (5d/7d…) / FCP / Timecode Slate Workflow

Preface: This setup isn't for everyone. If you are run and gun where slating is not possible, then this won't work. This is intended for Sit Down interviews or traditional dramatic movies where Slating is standard operating procedure.

Prerequisites
1. Timecode capable Recorder (I use the 788t)
2. Timecode Slate capable of jam syncing to 23.976 (I use Denecke)
3. Final Cut Pro (I believe post V5 will work)

In the past I personally used Protools to Sync Production audio to Picture. A round trip via OMF did the trick. I started looking into sending timecode to the Camera via wireless hops, but for Final Cut Pro users this required the additional cost in software to convert an audio timecode stream into AUX Timecode that FCP could read. Avid's Media Composer has this feature(Audio to Timecode) and therefore is a viable option. For this workflow though Final Cut Pro is used. PluralEyes and Programs like it work well and is your choice of syncing if a dumb slate is used..

Advantages of this method: If you are on a shoot and hired a sound guy to do dual system sound, there's a good chance he will have a timecode slate. If so, we will take advantage of Final Cut Pro's ability to modify the Timecode of a clip and place that information in the Aux TC for a given clip. The Aux TC can then be used to easily sync Video to Production Audio at no additional cost or extra software needed. This method works with any DSLR camera with the added bonus of not having to pile on extra gear to the camera. For Sound Guys like myself, this is very liberating, knowing I don't have to worry about sending any kind of feed to the camera and worrying about RF drop outs.

Disadvantages: If can't read the timecode for whatever reason then you will have to revert back to syncing by the clap of the slate. This is not a drag and drop solution, but does go much faster than trying to sync via the clap.

Steps:
1. Set your camera to the desired frame rate. In most cases that will be 23.976

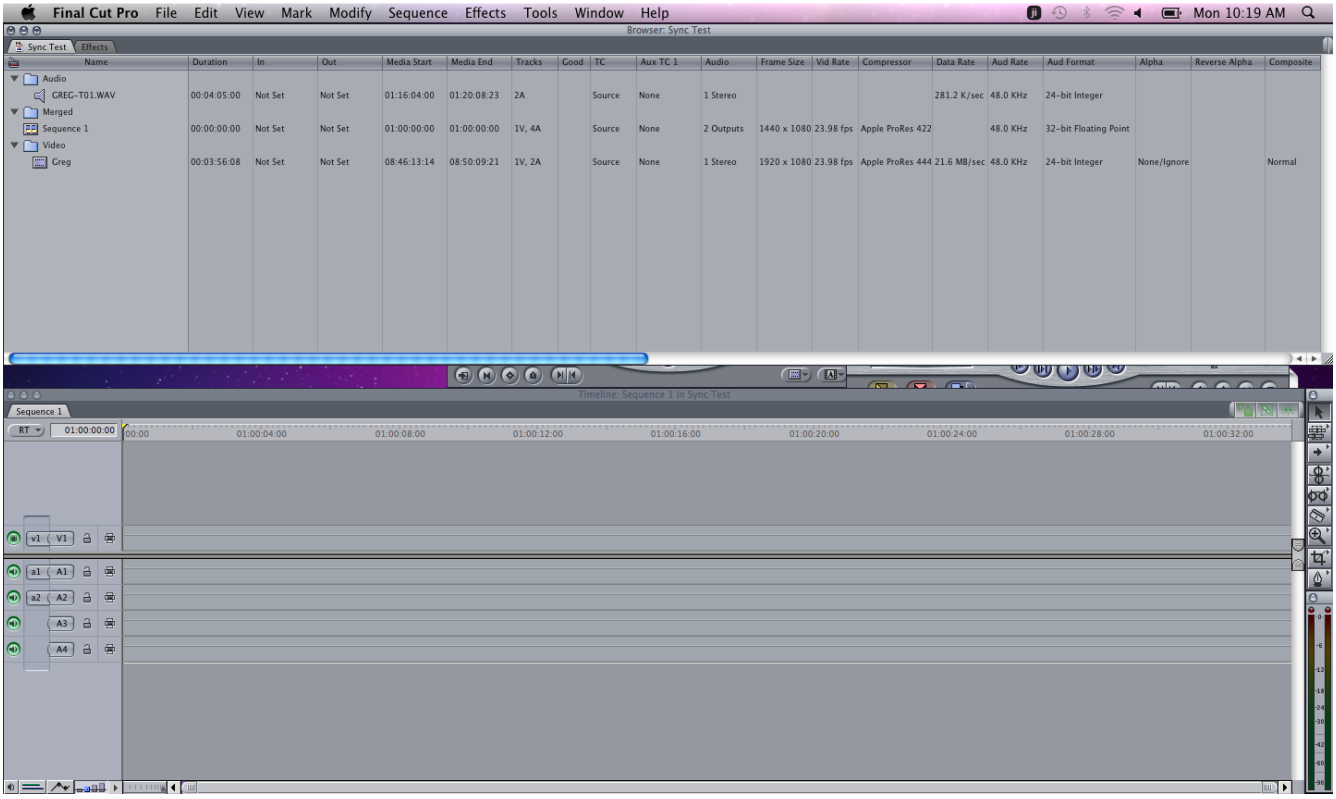
2. Set your audio recorder to 48k / 23.976

3. Optional Step: Prior to shooting, I set my timecode up to start at 01:00:00:00. I do this regardless of what time of day it is. This prevents any weird timecode overlap where you recorder may happen to start at say 22:00:00:00 and timecode from clips after the 24 break come before… So, this just eliminates that hassle.

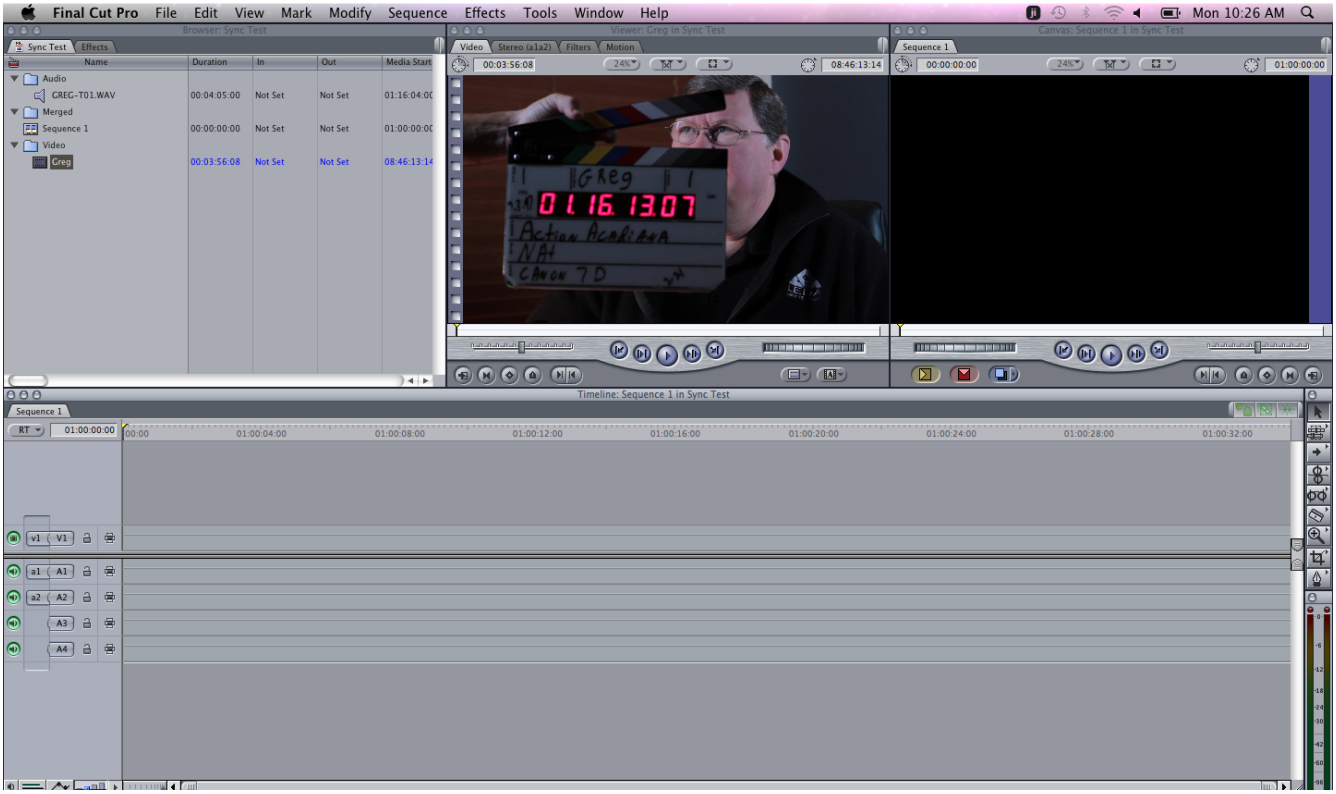
4. Set your timecode slate to 23.976 and jam sync to the recorder.

5. Prior to each take make sure the camera is rolling and that the timecode numbers on the slate are visible.

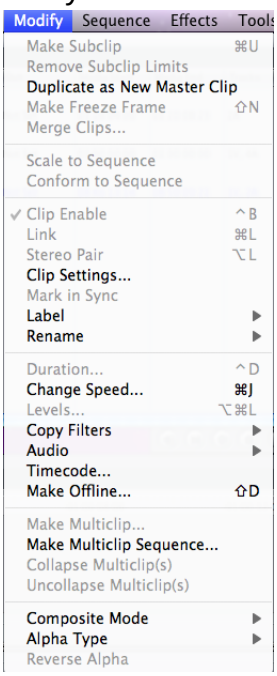
6. Import your footage into FCP (Transcode to whatever codec you desire) and Import the Audio. NOTE: At this phase of post I normally create three folders Audio / Video / Merged. I place the transcoded clips into Video, Production Audio into Audio while Merged will be used shortly.
I've stretched out my Bin window so you I can point out a few things. Note Greg-TO1.WAV Under TC and AUX TC 1 - nothing appears. But, yo can see under Media Start and End that the timecode is 01:16:04:00 for the start. In the Video Folder, TC is set to Source and Aux TC 1 is set to None. As you can see Media Start and Media End have no relation to Audio Timecode.



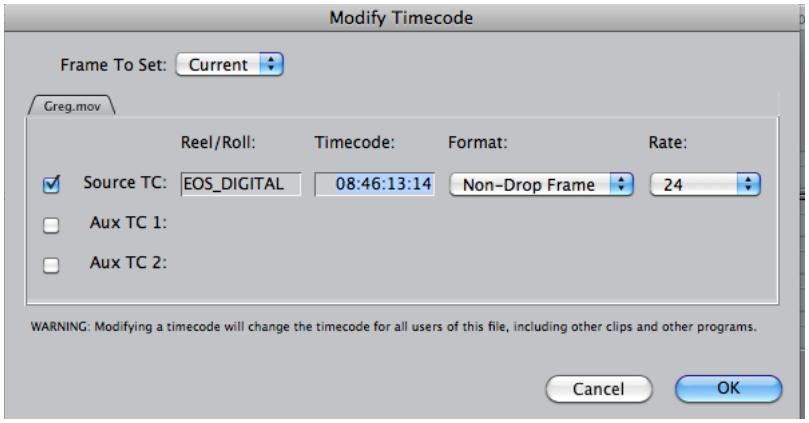
7. Reset your windows to standard three and double click on the video clip. This should bring it into the Viewer. Scrub around until you can clearly see the timecode displayed and is readable.



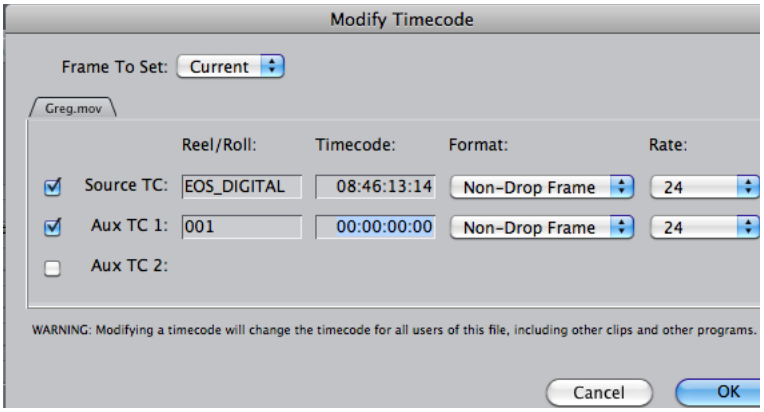
8. With the Clip Selected, choose Modify / Timecode from the Menu as shown below



9. This should bring up the Modify Timecode Window



10. Place a Check next to Aux TC 1:



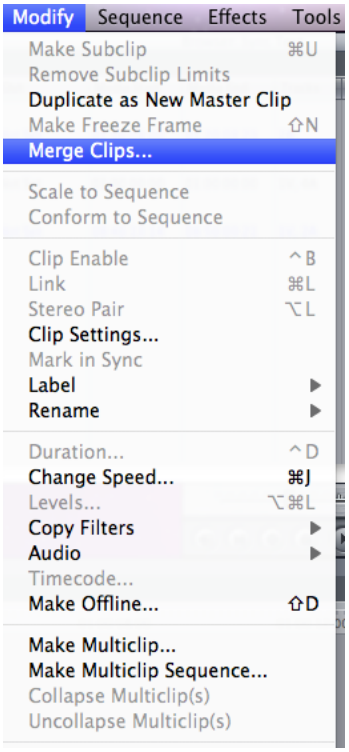
11. In the highlighted Timecode: box, Enter the Timecode you see on the Slate so they match. Press OK when Done.

12. Now in your Browser, look at the Aux TC 1 Column for your video clip. It should now Display the Timecode value you entered

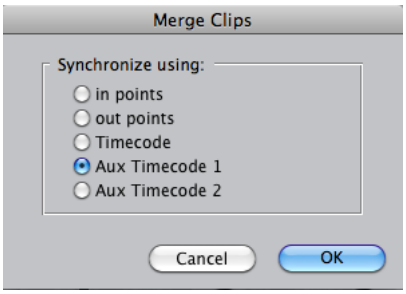
Name	Duration	In	Out	Media Start	Media End	Tracks	Good	TC	Aux TC 1
Audio									
GREG-T01.WAV	00:04:05:00	Not Set	Not Set	01:16:04:00	01:20:08:23	2A		Source	None
Merged									
Sequence 1	00:00:00:00	Not Set	Not Set	01:00:00:00	01:00:00:00	1V, 4A		Source	None
Video									
Greg	00:03:56:08	Not Set	Not Set	08:46:13:14	08:50:09:21	1V, 2A		Source	01:16:13:07

13. Select your Video Clip, hold the Cmd Key and click on your Audio File

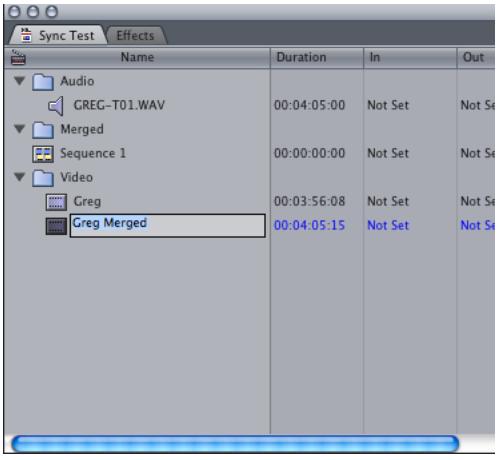
14. Choose Modify / Merge Clips…



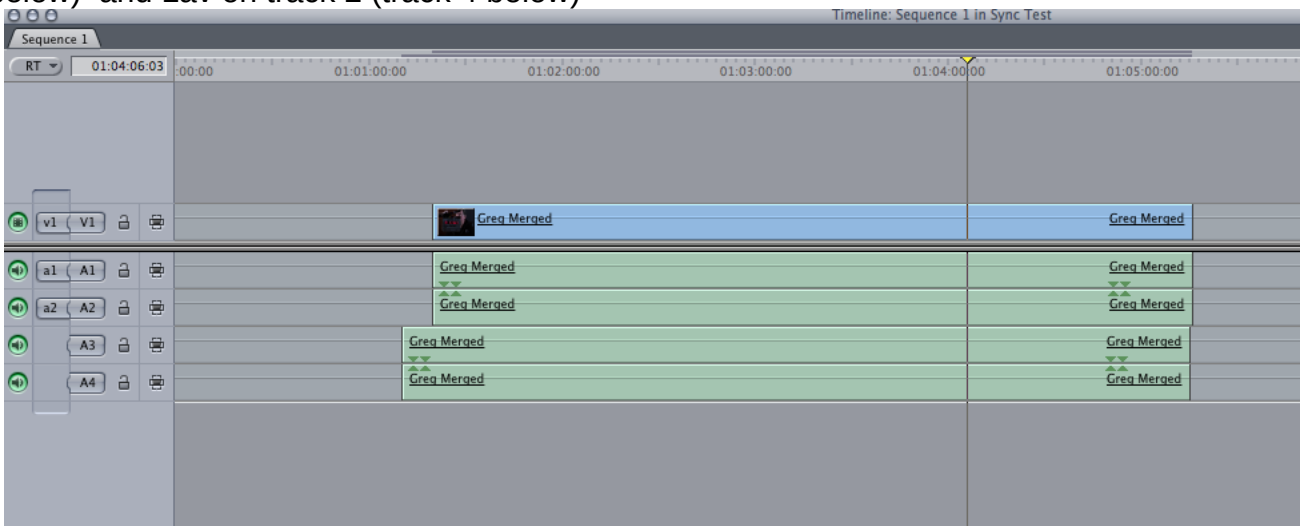
15. When the dialog box opens, select "Aux Timecode 1" and Press OK



16. A new clip is created and “Merged” will be appended to the end of the name. Lets Drag that Clip into your sequence



17. The top two audio tracks are the original sound from the onboard mic. Tracks below this are from the Production Audio Tracks. In my example I was using a Boom on track1 (track 3 below) and Lav on track 2 (track 4 below)

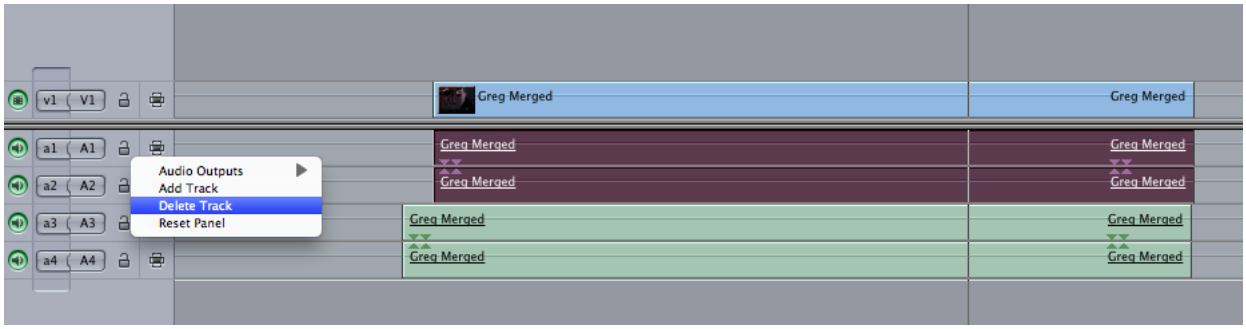


18. Mute tracks 1-2 and hit play. Your audio should now be playing back in sync with the video. You can unmute the original audio to double check sync integrity.

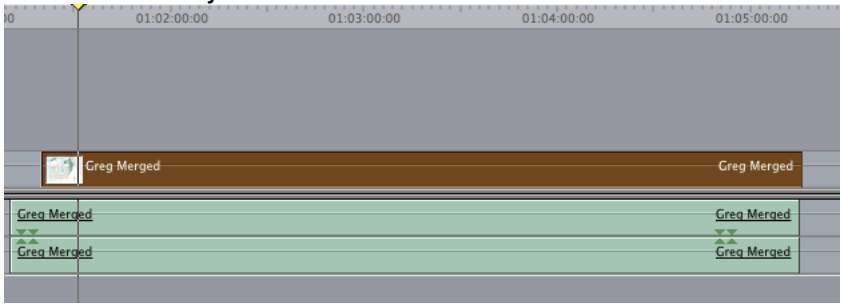
19. We now need to get rid of the original audio. Selecting the Video track should highlight both Video and Audio

20. Choose Modify / Link (This will de-couple the audio from the video. Now if you click anywhere in the sequence this should unselect everything. Now click on the audio from track 1-2 and notice that nothing else is selected.

21. Delete Tracks 1 and 2 (Hold the Ctrl Key down and click near the little Lock Icon). You have to Delete each track individually.



22. You are now left with just the Production Audio track and the Video.



23. Chose both tracks and Choose Modify / Link. This will relink the Video and Audio Tracks.

24. Drag the resulting clip into the “Merged” folder.

That's it, your clip is now in sync. Once you get the hang of the procedure it goes much faster than trying to do it by syncing to the clap or in my case is much faster than using Protools as I did before. Many of the projects I work on move between different computers and a good practice is to do a batch export of clips in the “Merged” folder. This insures the resulting Quicktime files will have Production Audio embedded in them..

Two final tips, one way to speed up the entire process is to Un-Check import Audio when you originally transcode your DSLR footage. If you do this then those steps (17-23) are eliminated as you no longer have to delete the original on camera audio.
If I power down my recorder I try to re-jamsync to my slate. While most gear is very good in terms of keeping drift to a minimum, it only takes a second or two to jam the slate to recorder...

Good Luck!!