Tuesday Afternoon (by Justin Hayward)

This is a cover of a song from the 1968 album Days Of Future Passed by The Moody Blues. This was a concept album that reached gold record status by stringing together various rocks songs with classical orchestra interludes. Nights In White Satin and Tuesday Afternoon were the best known hits from this album. These could be the first tastes that people had of the Mellotron, since it was featured so prominently in The Moody Blues' music.

The DAW used on this recording was Sonar Producer Edition V8.5.3. It was recorded at a sampling rate of 48kHz in 24-bit audio. The audio interface used was an Emu-1820m.

The musicians were:

- **Vocals:** Chris Del Priore (former lead singer and guitarist for Mesa Blue). Vocals sung through a Rode NT-2A microphone and an ART Digital MPA mic preamp.
- **Acoustic Guitar:** Chris Del Priore. Guitar used was a custom Moze 6-string acoustic guitar recorded using a Rode NT-2A microphone and an ART Digital MPA mic preamp.
- The rest of the parts were recorded by John Volanski:
    - **Bass:** Alesis NanoBass and Cakewalk Dimension Pro
    - **Drums:** Korg padKontrol played through Superior Drummer 2
    - **Orchestral instruments at end of song:** Kontakt 4, Gforce String Machine, Kurzweil K2000RS
    - **Mellotron:** IK Multimedia SampleTron, Meltron and Kurzweil K2000RS.
    - **Flute:** Sampletank 2.5XL, Kurzweil K2000RS
    - **Piano:** Kurzweil K2000RS
    - **Synthesizer:** Sampletank 2.5XL
    - **Choir:** Kontakt 4

Tracking Notes:

- My approach to this song was similar to Starman, except this song has way more MIDI and VSTi instrument tracks in it. There was no way I could do this song within just one Sonar project, because for sure it would crash my computer. The load on the CPU would simply be too great. So, the first thing I did was generate a reference track that we would use for all subsequent tracking. But then I made 4 copies of that Sonar Project with the reference track. One copy of the Sonar project would be used for all of the orchestral instruments at the end of the song. The 2nd copy of the Sonar project would be used for all the other instruments I played during the regular part of the song (this is the project where I will do all the final mixing). The 3rd copy would be used for the vocals, and the 4th copy would be used for the acoustic guitar parts that Chris did. It sounds complicated, but doing it this way I really just divided the whole song up into 4 manageable sections that can be handled much more easily by my aging dual processor PC running Windows XP.
- I did all the orchestral tracks for the song first using the Orchestral Project copy I created in Sonar. (This is for the last minute of the song.) I used the Gforce String Machine to play string chords, as this gives a nice full string sound. I did most all of the other instruments

using Kontakt 4. Once I had those done, I copied some of the MIDI tracks from Kontakt and created new MIDI tracks, and then I used the Kurzweil K2000RS to double up on those particular instruments. This helps make the final result thicker and more interesting, because I am using different samples and those samples are recorded at a slightly different time as compared to the Kontakt instruments (because the K2000RS is an external hardware sampler/synthesizer, and the timing/latency is slightly longer taking that extra path outside of the computer). I mixed all of these instrument tracks down into a stereo track, and imported that stereo track into the main Sonar project.

- For the drums, I used the Korg padKontrol to play the drum parts in real time.

- All of the other instruments I played as MIDI performances on the Kawai M8000 master keyboard controller.

- For the vocals, Chris recorded just one track (take) for the whole vocal performance. Then we went back and recorded a replacement section in the first and second chorus where the vocals were a little shaky. I comped those 3 tracks into just one final mono vocal track. I then used Melodyne on that comped track to correct any vocal pitch problems. When that was done, I imported that final vocal track over to the main Sonar project for mixing with the other tracks.

- I recorded Chris's Moze acoustic guitar using the mic positioned at the top of the fretboard to catch the crisp tones there. I pointed it away from the guitar's acoustic sound hole so I wouldn't catch any of that tubby component of the sound. We recorded just 1 track of the whole acoustic guitar performance, and then went back and recorded a 2nd track of just the beginning picking, and I replaced the original beginning picking with that 2nd take. I comped those two tracks into one final mono acoustic guitar track.

Mix Processing:

This song was mixed within Sonar Producer V8.5.3. The VST plugins used to mix the song were: Cakewalk Sonitus EQ, IK Multimedia Tracks-3 Black 76 Compressor and CSR Hall Reverb, Waves Kramer PIE Compressor and HLS EQ, Waves TrueVerb Reverb, and BBE Sonic Maximizer.

Mix and Arrangement Notes:

- The first thing I did was use Adobe Audition to open each track that was recorded with a microphone and perform as much noise reduction as I could on the tracks.

- For the bass, again I used the same bass MIDI performance to generate two different bass tracks. I just couldn't get a consistent sound all the way through the performance with just one bass. I EQ'd both bass tracks with the Sonitus EQ, added the IK Multimedia Black 76 plugin on each bass track, and then created a bass bus and sent both bass tracks to it.

- For the Mellotron strings, I used 4 different sound sources (3 software samplers and 1 hardware sampler). When I tracked these parts, I played all of the MIDI parts a little differently, and now I panned them differently and EQ'd them slightly differently to fatten up the sound and make it more interesting. Just playing one set of MIDI notes and applying that to 4 different sampler instruments will not have the same effect. I created a stereo Mellotron submix bus and sent all of the Mellotron tracks to it. I put the IK Multimedia Black 76 compressor on that bus.

- For the comped vocal track, I created a stereo vocals bus and sent that vocal track to it. I put the IK Multimedia Black 76 compressor and the Waves Kramer HLS EQ on that bus.

- For the drums, I used the very superior Superior Drummer 2. The whole drum kit is mixed within Superior Drummer, so I sent that drum mix to a stereo drum bus I created and put an instance of the IK Multimedia Black 76 compressor on it.

- The Piano is a combination of (mainly) the excellent grand piano on the Kurzweil K2000RS and also of a synthesizer voice (only in the choruses) that I added to augment the boogie low piano part. I combined these and sent them to a stereo piano bus.

- I took the comped acoustic guitar track and added the Waves Kramer PIE Compressor, Waves Kramer HLS EQ and the BBE Sonic Maximizer to it. Then I sent that to a stereo guitar bus I created.

- The flute is a combination of two MIDI performances, one driving a Sampletank 2.5XL flute and the other driving a Kurzweil K2000RS flute. This just sounds better. If you listen carefully to many commercial releases that have a real flute player in them, you'll hear that they have double-tracked the flute part to make it sound fuller. I created a flute bus and sent both tracks to it.

- I actually used four reverbs on this song: two instances of the Waves TrueVerb and two instances of the IK Multimedia CSR Hall Reverb. I did a strings stereo spread using the TrueVerb. This widens and thickens the sound. I also used TrueVerb for the strings reverb, plus I sent a little bit of the piano, guitar, flute and choir buses to it. The main vocal reverb is the CSR Hall. For the long reverb tails on the vocals at the end of the choruses, I used a separate instance of CSR Hall. All these reverbs sit on separate stereo buses, and I send portions of other buses to it for effect (but not the bass guitar and not the drums in this song).

- Again as I mixed this song, I alternated between using my studio's speaker monitoring system and my Audio Technical ATH-M50 headphones. When I listen to the monitor speakers, I add an instance of IK Multimedia's ARC 2 (Advanced Room Correction software) on the master bus to correct for the acoustic problems that my studio room introduces.

Mastering Processing:

This song was mastered using Adobe Audition (CS5.5). The VST plugins used to master the song were: Waves Lo Band EQ, Waves Multiband Linear Compressor, Waves L2 Ultramaximizer, and Har-Bal (i.e., the exact same approach as I used on Starman).

Mastering Notes:

Again, the first thing I do though is import the song into Har-Bal and look at it in there. Using Har-Bal, I try to get the EQ of the mixed song to be as correct as possible across the whole audio spectrum. Next, I import the song into Adobe Audition and do the rest of the mastering in there. First up, I use the Waves Lo Band EQ to get rid of any DC offset and low frequencies below a certain point. Next I use the Waves Multiband Linear Compressor. This applies linear compression in 4 separate bands across the frequency spectrum. And then the last step is the Waves L2 Ultramaximizer, which allows me to use up the full dynamic range of the digital signal without going over 0dBFS (again, see my Addendum for more on this). As a last check, I use Har-Bal to make sure I didn't ruin any band of frequencies.