then I prepared this, I the movement hat did not note in detail the movement of somewhat.

Notes on Superimposition of Frames 222 = 240 (taken from rough notes prepared at the National Archives):

222 on 223:
There is a slight forward turning motion of Governer Connally's head.

223 on 2248

Again, slight forward turning motion of head which now puts Connally almost directly facing camera looking slightly off to his right.

224 on 2258

Connally's left shoulder rizes a slight amount. His head turns so it is directly facing camera. Part of the top of the brim of his hat which is held by his right hand is visible (and has been since 222 but elearer in this frame) at chrome centerpiece of car.

225 on 226:

Connally's head turns more forward and his left shoulder lifts up much more than in 225. The brim of the hat lifts up considerably. A blue speck appears above the door directly above door handle. This is the corner of Connally's right cuff.

226 on 227:

The blue dot representing the cuff has moved up to the middle of Connally's chest. Despite the streaked blur occurring on the car in this frame, it can be seen that the hat has rizen to the level of Connally's chin.

227 on 228:

The hat is now obscuring Connally's left shoulder and is level with his mouth. The blue dot has dropped slightly and is almost level with the pop of the door. Connally's chest and head are both completely facing the front of the car. A small part of the red roses in the back seat are exposed by the forward movement of the right shoulder.

228 on 2298

The hat has moved down enough to expose the left shoulder which has rizen to the seemingly unnatural level of between Connally's nose and mouth. Connally's right hand now appears from above the door, rising rapidly as the hat it is grasping comes down. The blue dot of the cuff remains stationary. More of the roses in addition to part of Mrs. Kennedy's right side are exposed with the forward and slightly downward movement of Connally's right shoulder.

229 on 230:

Connally's chest and shoulders are in essentially the same postion. The blue dot has dropped to right above the door. The right hand has pivoted towards the right of the car bringing the hat down to a level slightly below the chin. This exposes a portion of the brim which has since been obscured by the chrome centerpiece while it puts the wide portion of the brim out of view behind the front seat. Mrs. Connally's forehead

can be seen above Roy Kellerman's head indicating that she is looking at her husband rather than in the direction of the back seat.

230 on 231:

Connally's hand continues to pivot towards the right car door. The cuff disappears behind the door. The movement of the hand is confirmed by the change in posttion of the hat. A slight rearward movement of the right shoulder hides the roses. Connally's head moves noticeably down and very slightly to the right. A little bit of the right collar of the shirt is exposed in 231 than in 230. This indicates that there is a transfer of weight from the left to the right side of the body beginning at this point.

231 on 2328

Connally's hand pivots a little more toward the door thus exposing a portion of the hat on the left side of his hand (left side here refers to looking at the frame). His right shoulder goes up a very slight amount. The head tilts down more. Also, more of the right shirt collar is exposed.

232 on 233:

Connally's right hand lowers slightly as the pivot in the direction of the door continues. The head moves very slightly down but noticeably to wards the door. The body itself seems to start falling towards the door.

233 on 234:

This falling motion becomes a rightward turn. The head also falls towards the fight. More of the right shirt collar is exposed as the left arm moves quite noticeably towards the door. Both the collar and left arm movement are signs of a shift of weight from the left to the right side of the body. As more weight is shifted towards the right, the jacket on the right side bunches up which exposes more of the shirt in that area.

234 on 235:

The rightward turn of the head and body, the hand pivot, the bunching of the right side of the jacket, and the movement of the left arm &M all continue. Also, the right shoulder lowers slightly to again expose some of the roses in the back seat. The mouth begins to open although at this point it is barely noticeable.

235 on 236:

All of the previously descibed movements continue and become more pronounced. The right shoulder has slumped more, more shirt collar is exposed, and the left arm has moved considerably more towards the door, all of which indicate a shift of weight which is progressively increasing.

296 100 2977

236 on 237:

The body is tilted more towards the door and the right shoulder is in approximately the same position. The left shoulder has lowered slightly, however, which indicates that the shift of weight has transpired - that all of the weight has been shifted to the right side of the body at this time. A lock of hair on the right side of the head begins to lift up slightly. The mouth has the shape of a circle and the left cheek is pushed out probably incident to air rushing into the mouth.

237 on 238:

The body is continuing its rightward turn. Evidence that the final transfer of weight from left to right occurred in the interval 236 -237 is provided by the fact that the right shoulder slumps considerably in this frame, obviously the result of sudden application of weight on the shoulder. The fact that the right and rear turn is not interrupted by the shoulder slump precludes the possibility that the force causing this slump originated from behind since absolutely no forward movement is observed in the shoulder or the body at this point. The lock of hair lifts up more, and the mouth is puckered, the cheeks pushed out and downward.

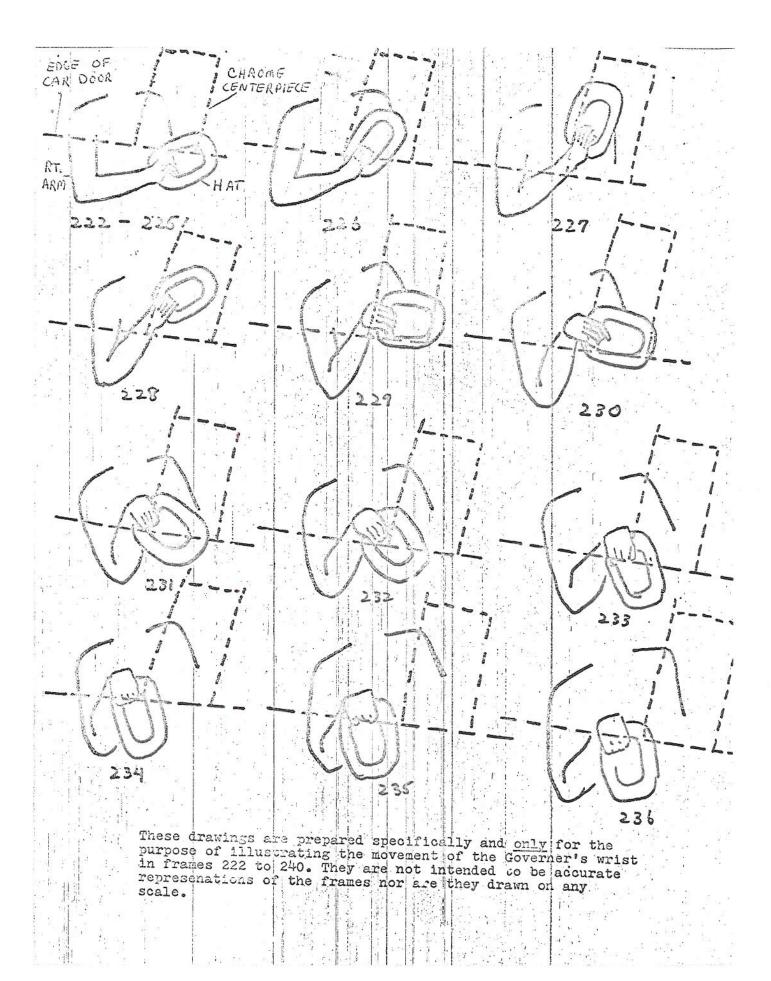
238 on 239:

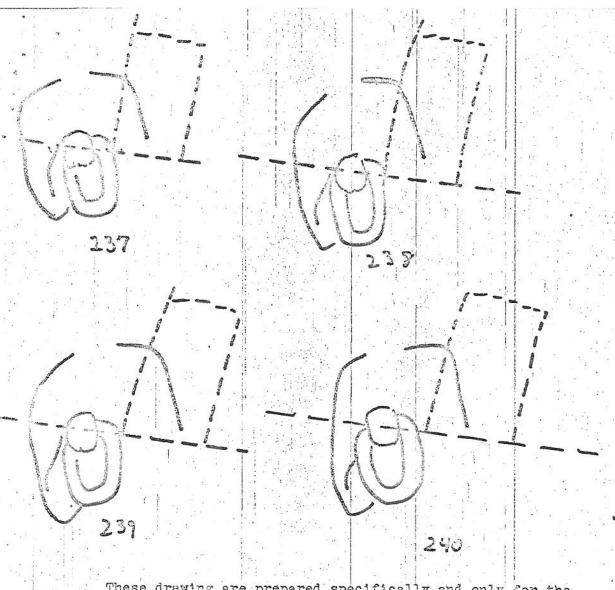
The right shoulder is in essentially the same position while the left one has lowered even more. The mouth is more puckered and the lock of hair lifts a slight amount more.

239 on 240:

The rightward turn continues and the head is considerably turned further right. The mouth is beginning to open and the cheeks have begun to hollow out.

The process of superimposition used in the previous study was methodically and precisely executed. The limousine in two sequential frames was focused on the screen so that it fell in the exact same position. Every feature of the car was aligned so minutely that in alternating the frames, absolutely no movement of the car was discernable. The only movements occurring were those of the occupants of the car. This MX process yielded results where any movement of the car's occupants could be detected. Thus it was possible to determine with great accuracy all movements which occurred in the interval 222 to 240. The attached illustrations should better demonstrate the movements of the Governer's wrist which sometimes cannot be sufficiently decribed verbally. These illustrations are not meant to be exact duplications of the frames.





These drawing are prepared specifically and only for the purpose of illustrating the movement of the Governer's wrist in frames 222 to 240. They are not intended to be accumate representations of the frames nor are they drawn on any scale.