I was the Captain on AA Flight 2401, DFW to TPA. I was the Pilot Flying (PF). Nutrition not a factor, and I was adequately rested.

At time of this turbulence event, we were in Day VFR conditions, visibility 20+ miles, ride was smooth. AA Airbus 321, Flight Level 310, .78 Mach. Location 40NW of REDFN Waypoint near airway Q105. No reports from ATC or other aircraft on frequency of any turbulence. PF was using Jeppesen FD Pro, WSI Pilotbrief, and SkyPath; alternating between applications. No indications of turbulence in our vicinity noted.

Due to excellent ride conditions, seatbelt sign was turned off, and weather radar was turn off.

Aircraft experienced one single jolt of severe turbulence. Turbulence caused autopilot to disconnect. Aircraft rolled approximately 30 degrees to the right and climb approximately 300 feet. PF took control of aircraft and returned aircraft to level flight and assigned altitude. All aircraft systems continued to work normally.

After event, an emergency was declared due to possible injuries to passengers and flight attendants. ATC was very helpful in managing divert and coordinating with KMSY. Diversion to KMSY was successfully accomplished. EMS met arriving aircraft at gate.

Captain David H Clark

I was the First Officer on AA 2401/24 June, and we experienced a severe turbulence event. This even took place on the third leg of the first day of a scheduled two-day trip. Fatigue was not as factor as I was well rested from the night before. The leg was scheduled to be operated from KDFW to KTPA, and I was the Pilot Monitoring (PM), and the Captain was the Pilot Flying (PF). The event occurred just past KMSY while in cruise at FL310 and Mach .78. The sky conditions were clear. The captain had Skypath open and it showed no events. I had WSI open and it showed no precipitation or convective activity on our route.

The event consisted of one severe jolt of turbulence. The turbulence event caused the auto pilot to disconnect and when the captain took control of the aircraft, we were in stable flight and the aircraft had climbed approximately 250 feet. We determined the aircraft to be stable and controllable and reengaged the autopilot while communicating with ATC about the event. After determining that injuries were sustained in the cabin, we commenced a diversion into KMSY. ATC declared the medical emergency on our behalf. I flew the aircraft and talked with ATC while the captain coordinated with dispatch and the physician on call. We safely recovered the aircraft into KMSY where we were promptly met by emergency services personnel who assessed the injured passengers and crew member.

First Officer Jason Shellock