



September 10, 2019

T&DI Awards Committee

I recommend Tony Gerardi for the Airport Pavement Practitioners Award. Tony and I first worked together in 1978 in the U.S. Air Force Have Bounce Program. The program objective was to determine the effects of runway roughness caused by rapid repairs using AM2 matting. Tony worked the aircraft modeling of our test program and I worked the runway flush repair methods. The ultimate field test in 1980 was full-scale, timed-repair of two craters using compacted crushed stone and a rubber membrane FOD cover. The field test also included instrumentation of the base and ejecta of the repair and takeoffs of a F-4 aircraft that had been instrumented to measure aircraft loading on the struts from the pavement inputs.

Tony took his Air Force experience in measuring aircraft response to runway roughness and made it into a niche business of which he became the world's leading expert. I joined the Airfield Pavements Committee (APC) about 1991 and Tony was already an established member. Tony chaired and I vice chaired an Airfield Pavement Roughness Subcommittee of the APC for two years. Then I chaired, and he vice chaired an Airfield Pavement Smoothness Subcommittee for another two years. The Subcommittee with the approval of the APC, prepared a draft advisory circular on Runway Roughness that was sent to FAA for consideration. Unfortunately, it took another 4 years for the FAA to write their own advisory circular on the subject with pressure from the APC and the American Concrete Paving Association.

I have enjoyed working with Tony for many years. He is honest to a fault; he gives his professional opinion honestly and states its limitations. While I was at The University of Texas at Austin, I helped him measure runway roughness one night at DFW airport on Runway 17R/35L for a research project. He helped me analyze the runway roughness at Austin Robert Mueller Airport that I measured with a TxDOT Profilometer. He guest lectured in my Airport Pavement Short Courses that I conducted at The University of Texas at Austin for ten years.

When I became an Airport Consultant for DMJM Aviation/AECOM, I used Tony for runway roughness evaluations for several airports. At Denver International Airport after the construction of newest 16,000-foot Runway 16R/34L, the FAA was threatening to collect a \$17 million pavement penalty from the airport, because they claimed the runway exceeded the grade limitations. I called Tony to have him measure the runway profile and calculate the aircraft response. We determined that the runway was very smooth and one of the best in the country for aircraft response to roughness. After a few meetings with the FAA and the Airport we were able to determine that the runway was built correctly but the digital file that was being used to evaluate the runway for grade was either corrupted or incorrect and Denver Airport was able to save the \$17 million penalty.

After I joined the FAA in 2010, Tony was my "go to expert" for pavement roughness expertise for FAA guidance and problem solving. He developed with cooperation with Air Canada a method that he would analyze on board aircraft sensors for G loading to evaluate runway roughness. Together we tried for a



few years to get the FAA to do similar research or experiments in the US. Because of the FAA bureaucracy where the Office of Airports and Flight Safety had different missions, we were unsuccessful.

Tony Gerardi is a visionary in airport pavements, he has been a pavement practitioner in about a hundred airports worldwide. He is the preeminent expert in his field. He has been very professional and very team orientated in every project he has worked. His goal has always been to advance the science, and protect the public, even at the expense of his business. His engineering ethics and professional conduct has been exemplary. I am quite proud to have worked with Tony on many airport projects and scientific endeavors.

As a long time Airfield Pavement Committee member and a Robert Horonjeff Award winner, I whole heartedly endorse Tony Gerardi for the Airport Practitioner Award.

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