

2009-09: Moron Air Base, Spain

## TrackJet® removes runway rubber for US Air force Base Moron in Spain

September 2009: German high pressure water jet systems manufacturer Weigel has recently completed over 40,000 m<sup>2</sup> of rubber removal services, at the Moron Air Base runway.



The Base is located in southern Spain, close to the city of Seville, and became a key pillar in the airbridge for airlift and fighter deployments in support of several operations, as well as a crucial refueling support base (largest tanker base during the Kosovo war).

Moron's massive flight line, in-ground aircraft refueling system, long runway and prime location on the Iberian Peninsula, made the base a vital link in many operations moving east from the United States. The particularly long and wide runway is frequently used by heavy aircrafts like the C-5, the C-17s and the KC-135 and KC-10 tankers. Moron AB is also home of the Spanish Air Force Ala 11 Squadrons, with daily movements of Eurofighter Typhoons.

In 1984, Moron became a NASA Space Shuttle Transoceanic Abort Landing (TAL) site in support of the space shuttle program. Such conditions, imposes several special requirements, in what concerns to navigation and landing aids, personnel and infrastructures, including the runway.

Rubber deposits were already quite significant on both touch-down zones, as the previous rubber removal intervention took place more than 3 years before, and both runway ends are frequently used for landings.

The elliptical typical shapes of rubber marks were covering an asphalt area and also the concrete ends, with an extension of around 300m, almost up to the threshold lines. The rubber removal operations were performed every day, during the periods with less aircraft movements, to minimize interruptions.

One of the most recent TrackJet models, TJ-24 complete with high capacity vacuum suction system, successfully achieved the demanding degree of removal USAFE defined (up to 90 %) without damaging the surface, and granting an average speed of 700 sqm/h, and even more on concrete areas.

Using an exclusive computerized control system, the TrackJet removed rubber on two different pavement types, with homogeneous results, without damaging the surface, the paint marks, the sealings or the arresting system.



The high temperatures registered during the day, over 35°C were not a problem for the equipment, designed to work on even tougher environments, like what frequently happens in Middle East or Africa, where Weigel already operates with several references available.

496 Air Base Squadron Airfield Manager, MSgt Jonathan Sollisch, responsible for runway pavement matters at Moron, followed closely the evolution and progress of the mission, confirming his approval on the final inspection meeting: "In 17 years of experience, I must confess I've never seen such an efficient removal method. Perfect!" he said.

Although concerned with the friction reduction that the rubber deposits cause, MSgt Sollisch was also concerned about potential damages to the pavement. He was pleased to notice the equipment's capacity to control the water jets according to the thickness of the rubber layer prevented damage. "Approved with no doubt!" confirms the Airfield Manager.

The positive results were especially impressive on concrete, not due to a higher removal rate, or to a lower rubber accumulation layer, but most of all, because the color contrast between the black rubber and the grey concrete was even more evident there.

Ruben Figueiredo, from Weigel/TradeTarget, who oversaw the project, explained: "After almost 60 consecutive operating hours, we left Moron without one single failure and with the customer pleased. That's our goal for all missions, on asphalt or concrete pavements, on military or commercial airfields, removing rubber deposits or paint marks!"

Trade Target Lda, Portugal  
Ruben Figueiredo