

# GRIP-FLEX GAZETTE

## AIRFIELD MAINTENANCE NEWS

JANUARY 2009

VOLUME 1, ISSUE 1

### ***Rising Asphalt Prices Cause Aviation Officials to Seek Long Lasting Cost-Efficient Alternatives for Resurfacing***

#### **Qualifies for "Shovel Ready" Federal Project Funding and AIP Funds**



**The Thermoplastic Resin Based Binder used in GRIP-FLEX Surfacing substantially outperforms any asphalt based micro-surfacing product.**

Asphalt prices have continued to rise at an alarming rate over the past six months, and although the price of crude oil has gone down recently, the price of asphalt has not. There are

a few major reasons why the price of asphalt, even though it is a petroleum based product, is not directly linked to the price of crude oil.

In an attempt to keep the cost of gasoline at a minimum, crude oil is being refined to produce the maximum amount of gasoline and diesel, which means less production of liquid asphalt per barrel of crude oil. Many states, such as Texas, are experiencing shortages of liquid asphalt as a result of this process. States, counties, and cities across the country are looking at alternative products and procedures to avoid suspending or cancelling their pave-

ment projects altogether.

The importance of preventive maintenance has never been more evident. Many organizations are evaluating alternative cost-efficient methods to hot-mix asphalt (HMA) for rehabilitating their pavements. Micro-surfacing products in particular are frequently being used as a way to rehabilitate pavements that were originally budgeted for a mill and asphalt overlay.

***(Thermoplastic Resin based binders such as GRIP-FLEX have largely replaced asphalt based micro-surfacing products in the most progressive aviation markets).*** Additionally, budgets for avia-

tion construction projects are not increasing fast enough to keep up with this unexpected spike in prices. Liquid asphalt only makes up roughly 5 to 6 percent of HMA pavements, but the increased cost of fuel has driven up the price for shipping aggregate as well as the price of transporting the asphalt from the plant to the project location. Even though crude oil prices have dropped, the price for diesel fuel remains high. All of these factors have resulted in some of the highest HMA prices in the history of the United States.

### ***Texas Historic 6666 Ranch Installs GRIP-FLEX on Runway***



The 6666 (Four Sixes) Ranch in Guthrie, Texas is internationally renowned for their horse breeding and

top quality cattle. 6666 Ranch is equally known for its massive oil fields that were discovered in 1969.

Visitors flock to the ranch every year to learn more about its history, and to see their world-famous horses. The ranch has a 5086' x 75' runway that services the entire ranch, landing even the largest commercial grade aircraft. Earlier this year, the ranch decided the most cost-efficient way to rehabilitate and resurface their runway was to use GRIP-FLEX. In the dry climate of West Texas, oxidized gray asphalt pavements can often be hard to identify from higher alti-

tudes because of the similar color of the desert terrain. By installing GRIP-FLEX for their rehabilitation needs, they now have a certified friction course runway that will not fade in color or blend into the terrain. We are pleased to be a part of the rich history of the 6666 Ranch, and look forward to watching the performance of their runway over time. For more information about the 6666 Ranch, you can visit their website at [www.6666ranch.com](http://www.6666ranch.com).

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**Find more information at: [www.GRIP-FLEX.com](http://www.GRIP-FLEX.com)**

## ***GRIP-FLEX Surfacing Rapidly Expands onto Southwest Airports***



ABOVE: Terrell County Airport, Dryden Texas. The first GRIP-FLEX Surfacing installation for TxDOT Aviation, back in 2005. This is an actual arial photo provided to us by Hanlan Aviation. If you go to Google Earth and look for Dryden, Texas, the satellite photo will look just as vivid. GRIP-FLEX is VISIBLE.

All over the Southwest United States; airports, engineering firms, and state DOT Aviation organizations have changed the old way of using road and driveway maintenance products on airfields to GRIP-FLEX Surfacing, a product that is specifically designed to rehabilitate and preserve airside pavements. Professionals are using AIP Funds and Federal Specification: FAA EB 35, which GRIP-FLEX meets, for their pavement rehabilitation needs. Since the first installation of GRIP-FLEX was completed for the Texas DOT Aviation at Terrell County Airport in 2005, GRIP-FLEX has exploded across the Southwest, especially in Texas and Oklahoma. Over 25 airports in this region have used GRIP-FLEX to resolve severe pavement rehabilitation.

Increased GRIP-FLEX usage is due to increased cost of asphalt, increased focus on pavement preventive maintenance, and the development of GRIP-FLEX crack-fill and pre-lift procedures that offer a complete rehabilitation product at a substantially lower cost than traditional road and parking lot products are capable of providing. Texas is a leader in the aviation field with over 300 public use airports. With the increase in the price of construction, budgets are becoming significantly tighter as each project costs far more than originally projected. For their pavement projects, GRIP-FLEX has become a practical solution for successful, cost-efficient rehabilitation. By using GRIP-FLEX crack-fill to fill existing cracks, and GRIP-

FLEX pre-lifts to raise low spots and pavement bird baths, GRIP-FLEX is able to level the entire existing pavement before installing the final micro-surface. The entire process costs less than half of the cost of a mill and overlay, freeing up valuable money for other projects. Organizations such as TxDOT and the Oklahoma Aeronautics Commission recognize the importance of maintaining the pavements at their facilities. They understand that, if these pavements are left alone and get to the point of base failure, the cost of reconstruction will far surpass the price of a pre-emptive rehabilitation project.

- Southwestern USA Airfields with GRIP-FLEX Surfacing on Runways, Taxiways, Aprons and or Ramps:***
- Terrell County Airport, TX**
  - Weslaco Airport, TX**
  - Max Westheimer (Norman) OK (2 projects)**
  - Tulsa Riverside Airport, OK (2 projects)**
  - Livingston Municipal, TX**
  - Childress Municipal, TX**
  - Hugo Municipal, OK**
  - Blackwell, OK**
  - Eldorado, TX**
  - Munday Municipal, TX**
  - Jayton Municipal, TX**
  - Arlington Municipal, TX**
  - Lubbock International, TX**
  - New Century Airpark, Olathe, KS**
  - Paducah, TX**
  - 6666 Ranch, Guthrie, TX**
  - Spicewood, TX**
  - La Porte Municipal, TX**
  - TP McCampbell, TX**
  - Stephenville Clark Field, TX**
  - Athens Municipal, TX**
  - Sheppard AFB, TX**

# GRIP-FLEX Crack Filling vs. Rubber Crack Sealing

Traditional methods for bandaging cracks in airside HMA pavements have been either placing a short term “hot rubber seal” over the top of the crack or for very deep cracks a very expensive “reconstruction” involving complicated milling and asphalt installation procedures. Hot rubber crack seal has two problems. First, the rubber can not fully penetrate the depths of the smaller cracks. Second, the rubber oxidizes and delaminates over a rela-

tively short period of time. Either way, the “hot rubber seal” is at best marginally effective. Many different techniques have been tried to improve the effectiveness of hot rubber crack seal, including increasing the size of the crack (??) in order to allow more

rubber to penetrate into the crack in the hopes of improving the results. In July 2005 the University of Connecticut released a study of traditional crack sealing methods and a diagram showing the method which meets FAA Specifications is shown here. When we use GRIP-FLEX binder to “FILL” your cracks prior to installing a GRIP-FLEX Surface our material pours like water and reaches all the way down into the deepest cracks. GRIP-FLEX Crack Filler protects the base by filling the entire void in the pavement. Traditional methods (FAA Spec) for crack sealing do not require the rubber material to fill the crack all the way to the bottom as you can see in the U of C diagram. GRIP-FLEX material can be poured into the crack in a liquid form to allow for complete penetration of the entire crack, regardless of depth and width.

At Ameriseal, we use the same legendary binder that is used to

create the GRIP-FLEX Surfacing to completely fill and seal even the deepest and widest cracks. By changing the type and amount of aggregate in the mix, we can fill cracks as small as 3/8” wide and as large at 4-5” wide and 18” deep. Our process involves filling the crack completely, regardless of how many fills are required to create a level surface.



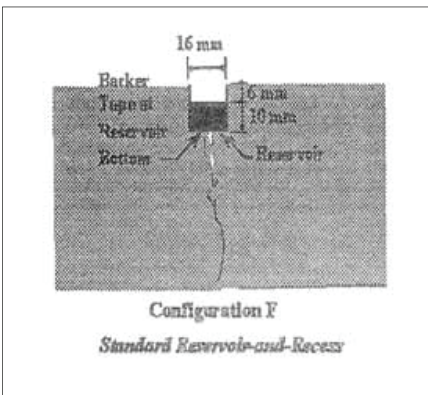
**BEFORE GRIP-FLEX**

**Above:** Very Deep Wide Crack at Tulsa Riverside Airport:

**Below:** Crack Filled with GRIP-FLEX Crack Fill and partially covered with GRIP-FLEX Surfacing

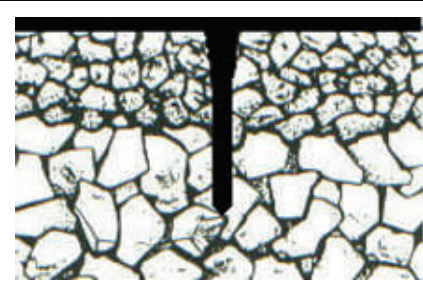


**AFTER GRIP-FLEX**



**ABOVE:** Traditional Methods for FAA Spec. Rubber Crack Seal do not fill the cracks completely leaving the base vulnerable to continued damage from water. (University of Connecticut 2005)

**BELOW:** GRIP-FLEX Binder will completely fill the crack regardless of depth, and when combined with a GRIP-FLEX Surface provides real protection for the base.



STAYS BLACK

No Fading or Oxidation

100% Fuel Resistant

## **GRIP-FLEX Project Feature:**

### **13 Year Old GRIP-FLEX Surfacing USMC CHERRY POINT MARINE CORP AVIATION STATION, NC**



ABOVE: 13 Year Old GRIP-FLEX Surfacing at Cherry Point Marine Corp Aviation Station, North Carolina. Still BLACK!

closings initiated during the 1990s, the manufacturer of GRIP-FLEX Binder determined that the company's focus should be re-directed into civilian aviation. And of course Thermoplastic Resin Based Binder has become a dominant force in the civilian aviation market.

The legacy of GRIP-FLEX Surfacing from Military projects conducted during the 1990s provides for some interesting opportunities to evaluate the true performance of a non-oxidizing fuel and chemical resistant, highly skid-resistant product.

As you can tell from the photograph, there has been virtually no deterioration of the GRIP-FLEX Surface

which was installed back in 1996. There is no delamination, no oxidation and there is no FOD. The Thermoplastic Resin based binder used to create the GRIP-FLEX Surface has completely protected the asphalt from the damaging effects of the natural environment, and the toughness of the material has prevented the release of any aggregate which creates dangerous FOD. If this was a standard asphalt surface or an asphalt based micro-surfacing, this airside pavement would have required substantial rehabilitation or even reconstruction after so many years. This GRIP-FLEX Surface was installed back in 1996 and the photograph was taken in March 2008 during an Ameriseal Inspection Visit.

Back in the mid 1990s, some of the largest installations of GRIP-FLEX Surfacing could be found on military bases. Thermoplastic Resin Based binders used with specifically graded aggregates were the NATO Standard in Europe and had a large following in the U.S. Military. With all the base

### **GRIP-FLEX Re-Surfacing is a Shovel Ready Project!**

#### **What is meant by the term SHOVEL READY?**

The Federal Government is about to unleash the largest economic stimulus program in the history of our nation. They will be funding construction projects that are "Shovel Ready", meaning projects that are planned and ready to begin very soon to have the maximum job creation effect. A resurfacing project using GRIP-FLEX on an airfield or other public facility or road can be planned and submitted in a matter of days or weeks. Call Jim, Jonathan or Bob at 1-330-669-3441 to discuss your options.

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**Ameriseal's  
30,000 sq. ft.  
manufacturing  
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