## Excerpts from SUPERTRAX

Spring 2007 Issue

## The SKIDFRAME

Photos and stories by C.J. Remstadt

## AIR-WAVE™ SUSPENSION from TeamFAST and AIRlink

The first snowmobiles were actually much more like tanks than what we ride today..... The slide rail that underpins the design of the skid-frame came along quite early, appearing in the 1960s..... Suspension travel was extended to minimize the (negative) situations during the '80s and early '90s and it helped, but another breakthrough was needed.

A former racer and snowmobile chassis designer worked independently on this very problem for nearly a decade.....by designing a moving link between the two trailing arms that would allow them to work independently when needed and work together in the bumps, his suspension was capable of delivering a truly compliant ride unlike anything that came before.

That suspension was the M-10 and the designer was Gerard Karpik....the M-10 became, without question, the most successful aftermarket product in



**snowmobile history**..... But suspension design progress is still not over.

Unlike metal springs, an air spring actually absorbs energy as it cycles, making the job of controlling rebound much more straightforward. The air spring also has, as perhaps its defining characteristic, a natural progressive rate that fits perfectly with the need to set up

for the G-bump. Put another way, the air spring **naturally ramps up its "spring rate" making it literally bottom-proof**.

The original M-10 revolutionized snowmobile track suspension technology. With the debut of the Air-Wave for 2007, snowmobile suspension design takes another quantum leap forward.