ALP AND JALIKA'S 650 TRIUMPH RECORDS

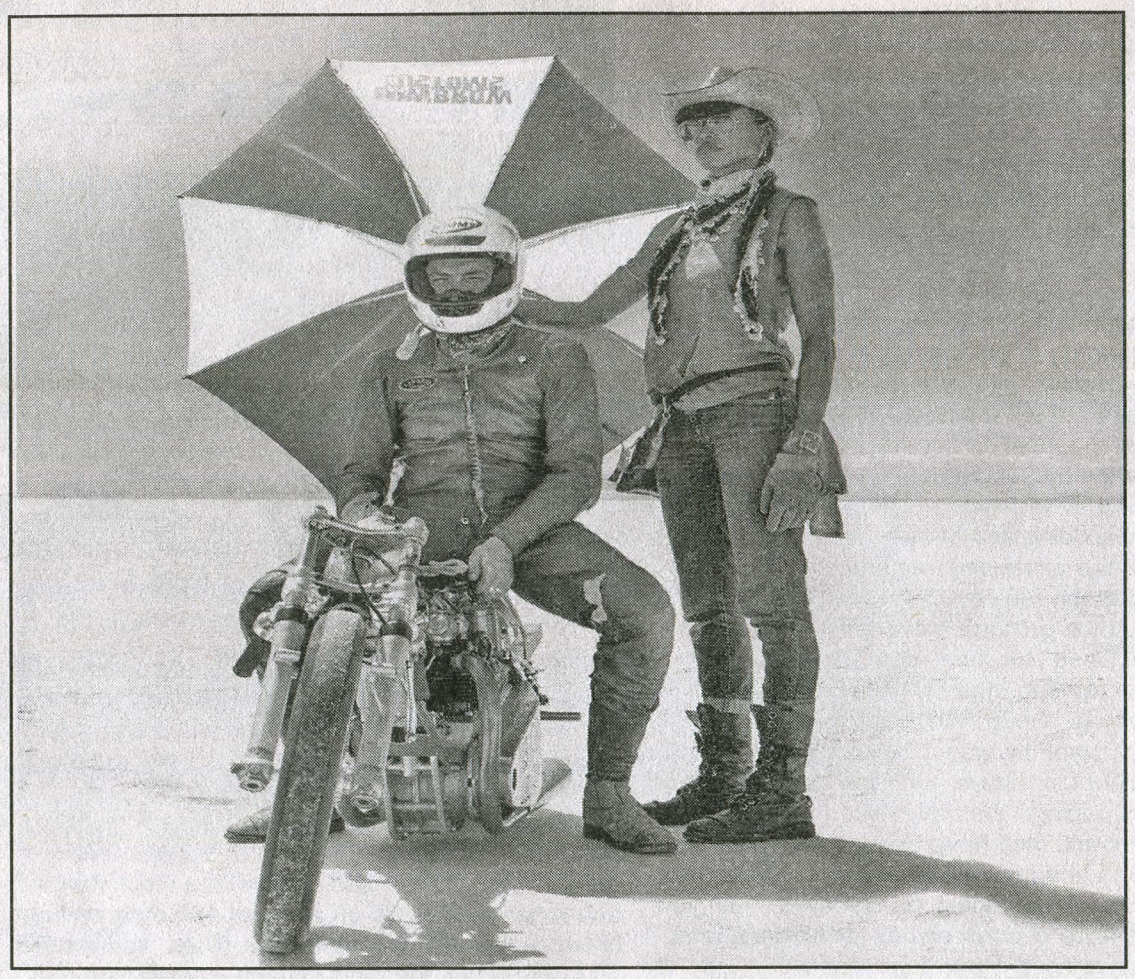
By Bill Hoddinott

In the six seasons since 2011, the team of Alp Sungurtekin (rider) and Jalika Gaskin (Crew Chief) have made a BIG impact in Land Speed Racing. They are currently running a 650cc Triumph in Vintage Pushrod gas and fuel classes, at both El Mirage and Bonneville,

Like your scribe whose name is pronounced "Hod-not", Alp and Jalika have names tough to spell and pronounce; so let's get that out of the way first. Say "Suhn-gur-tech-in" and "Jah-lee-kah" and you'll be right.

They have become a familiar and popular sight at El Mirage, where they show up for every meet. Their shop/studio, in Shadow Hills California; is a stones throw from Burbank in the Los Angeles metro area. Alp was university-trained in Industrial Design and his PIC/CC (partner in crime/Crew Chief) Jalika is an artist and fashion model with degrees in Art, History and Studio Art. She also is currently studying Jewelry/Metal Fabrication. They offer professional services in design, and manufacture of land speed motorcycle racing parts. The team has set many official records since Speed Week 2011. Between seven in SCTA, three in AMA, and one at the Mojave Mile, their fame has brought them plenty of customers!

Both of them are highly skilled in computer work, and they have the most excellent website you have ever seen. To see its awesome graphics and for more information, go to; www.alpracingdesign.com.



Alp and Jalika ready for a pass at Bonneville with the Class A nitro 650 Triumph. Note the construction details of the bike.

photo by Carlos G. Maier

Your scribe came along to the hot rod and motorcycle world from model airplanes, in the early 1950s; and was always well aware of the hot and stylish 650 Triumphs. Triumphs, for many years were the biggest selling British bikes in America; and have recently made a strong come back. Most if not all readers will also have seen the famous Marlon Brando film of 1953, "The Wild One", which displayed to great advantage, the 650 Triumph Thunderbird he rode. That must have sold a lot of Thunderbirds! Almost every young man in America wanted to be Marlon Brando about that time.

Many readers like myself, must have been intrigued when Alp and Jalika started to run and break the records at El Mirage. They quickly made friends with the El Mirage crowd, and in a very short time they have left their mark. First they had an old original framed Triumph; before long they appeared with their wildly exotic Class A frame bike. This was clearly designed for the absolute maximum aero efficiency for a naked bike (no fairing). Despite Alp's rangy 6'2" frame, and 180 pound weight, he gets down into the bike. His latest speeds on fuel have been in the 175 mph range, far faster than any naked Triumph in history!

We also heard that he was running nitromethane "straight from the can", which bespeaks deep knowledge of fuel management; but only Alp and Jalika know what percentage they really use. We do know that historically, it is almost impossible to get reliability and durability from engines running very high loads of nitromethane.

Taken all together, I knew this team had an interesting story to tell readers so I got in touch with the pair, and they kindly agreed to this interview. Alp leads off with the deep technical information, and then we go to Jalika for her perspective as Crew Chief:

ALP SUNGURTEKIN

Bill Hoddinott: Alp, thank you for agreeing to tell our readers about your racing. You and Jalika have been so busy and active, rushing ahead so fast with your bike development and speeds, that I thought you must be about 30 years old, but you have just told me you are 43!

Alp Sungurtekin: (chuckling) Bill, thanks, but at 30 I was very far from knowing enough to be able to do what we're doing now! I love to study all the lore and history about this kind of racing, and we have plans for much better things in years to come! I have had some wonderful coaches among my SCTA friends too! For the last couple of years I have been subscribing to Bonneville Racing News and I must tell you we enjoy all your articles.

Bill: Thanks, Alp! Tell us something about your background.

Alp: I was trained at university in industrial design, and had many years in hot rods and muscle cars. This led me in 2001 to follow my heart to the mecca of hot rod and motorcycle racing, Southern California. I set up my shop in 2006 at Shadow Hills, a suburb of Los Angeles. A year later I met Jalika in New York on a trip, and we have been partners ever since. She is not at all afraid to get her hands dirty. In fact she enjoys mechanical and hands-on things as much as I do. Jalika is an invaluable crew chief at all the meets, changing oil, purging the nitro from the fuel system between passes, and doing anything else that's needed to get the bikes ready. She works with me in the shop every day.

Bill: What led you to concentrate on the 650 Triumphs? They are a great old British design, with a tremendous background in racing and road sport use throughout the world. Huge numbers were sold in the USA and they are still very popular in the vintage movement today.

Alp: As soon as I hit Los Angeles I wanted to get into SCTA racing, and in looking at various low-cost options, (since I didn't have much spare money for racing), I saw the vintage Triumph 650 offered the most speed and fun for the least cost. From the late 1940s through to the 1970s, vast numbers of them were sold in Southern California (Thank you Marlan Brando, R.I.P.) which means that they are still plentiful, easy to find, and bikes and parts are inexpensive. Not only that but the factory as well as the aftermarket made plenty of high-quality racing parts for them, which are also easy to get. Then too, things like crankshafts and camshafts were interchangeable in the engines over many years, which makes it easier and cheaper to build them. The Triumph Company liked to keep things simple for themselves, their dealers and the riders. This was an excellent principle, we are still benefit-

ting from now.

I considered the period BSA's and Norton's, but the Triumph has the advantage of two separate camshafts where the BSA's and Norton's only have one. On the Triumph the two camshafts are identical, but of course are timed differently to the crankshaft. The two camshaft design gives you more flexibility to try the effects of small variations in setting the cam timing.

On gas engines especially, I think cam timing and lift are critical factors. I also give a great deal of attention to porting to get the maximum possible air flow into the engine. With fuel engines most of the power comes from the fuel; but I still optimize the porting to get the most air into the cylinders possible, and use the most favorable cam timing and lift.

But Bill, before going any further, I must tell you that our program has advanced tremendously from membership in the Milers SCTA Club! We have had SO much fun going to the meetings, and I must mention that Doug Robinson, Tom Evans, and Howard Allen,(among others), have mentored me all along the way. Doug Robinson goes way back to the 1960's, when he was a famous Top Fuel racer, and all of them have a tremendous amount of experience in racing. We have asked them a million questions and they have always been kind, and gracious about sharing their knowledge. Whenever I ask Doug about fuel racing, he first says, "Alp, you must always have a lot of respect for nitromethane." So first and foremost, if you don't respect nitromethane; you will wreck expensive equipment, faster than you can pull out your wallet!

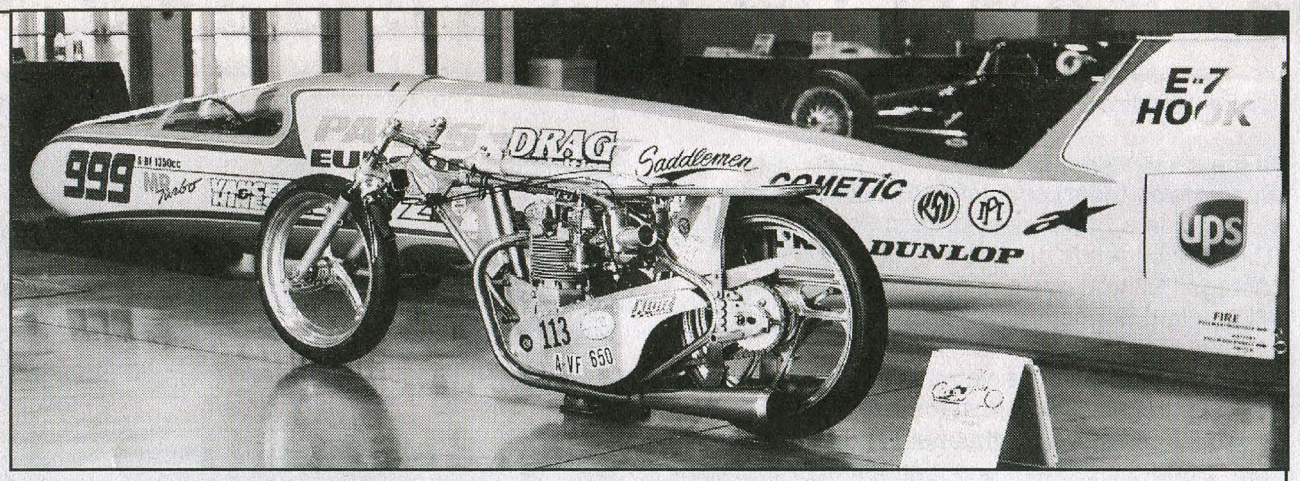
Bill: Alp, that is an excellent point! There are vast amounts of knowledge in the heads of the SCTA veterans, as well as those who race at other tracks around the country. Most of them will gladly share their experience with younger people who want to learn. Land Speed Racing is a lifetime sport for many of them, and they want younger people to come along and take their places when they leave the stage. I have enjoyed learning from the many stars I have interviewed for Bonneville Racing News, and they have shared their knowledge with readers including younger racers. I am always anxious to reach out to even more veterans, who want to tell their stories for the Bonneville Racing News!

Okay, how did you get started?

Alp: After setting up our small business, by 2008 I was in a position to think about what I could build for SCTA racing. During 2008 and 2009 I studied all the lore about the history, and design of the old 650 Triumphs. It was a simple pushrod engine, designed to be easy to build and work on. As mentioned before, parts were plentiful and inexpensive here in Southern California. I knew I could race them in both Vintage and Pushrod classes, gas and fuel, with no fairing needed.

I started off by buying enough original parts to build what amounted to a stock-frame 1950 iron-head 650 Thunderbird. At first I used a 1930s Triumph girder front fork, with the hard-tail frame; and later on I put Ceriani forks on both bikes. Harman and Collins were the big name in Triumph racing cams

in the 1950's, so I picked up a pair of them to use. I knew I needed to start off small (walk before you run) and figure out what I was doing before trying to go too fast.



Alp and Jalika's Class A 650 Triumph nitro bike right next to the late Sam Wheeler's E-Z-Hook streamliner. Another opportunity for study of the design details of the Triumph.

By 2010 we had our first bike built; and Jalika and I started taking it out to El Mirage, privately to test it. You can go out there and do this, as long as you do it safely. El Mirage is public land, so you have to be sensible.

In 2011 we ran our first race at El Mirage. We entered the Vintage Gas class with a stock frame; and I managed to fall off at about 100 mph, without injury. A rear wheel bearing had failed; and the tire was rubbing on the fender brace, causing the rear wheel to lock up.

I have a GPS on the bike which tells me my speed accurately. Our first gas engine was pretty strong; it should have given 110-120 mph at El Mirage. In 2015 at the July El Mirage meet, I was running the fuel engine in Vintage class with the stock frame. The rear rigid frame portion (which is removable on the early Triumphs) had suffered from internal corrosion in the tubes, which weakened them. I was running on a 145 mph record, and I saw 160 mph on my GPS; but then the bike started slowing due to the tire rubbing. I went through the lights at 149 mph with the tire shredding, but it held. The torque from the chain was pulling the wheel over, until the tire rubbed on the fender brace.

After I figured out what was happening, I made a new rear hard-tail frame using the original pattern, and 1" by 1/8" wall DOM tubing, (very strong). We eliminated that problem. The rules allow you to make replacement parts to the original patterns, for safety.

Bill: How long does it take you to get to El Mirage from Shadow Hills?

Alp: About 90 minutes, which is not bad.

But not to get ahead of myself! We also entered Vintage gas class at Speed Week in 2011. Our antiquated forks, 21" front wheel, and 32mm Amal Concentric carburetors on a ported iron 1950 head with 1960 valves, and 11.5 NOS Hepolite pistons,

(try saying that five times fast) although we were very green, we were able to achieve 114 mph. You realize that for Vintage class you have to have pre-1956 cases and heads. In 2012 we raised our own record to 127 mph, and in 2013, 132 mph all on gas with the stock OEM Triumph frame and the old original Triumph engine parts.

Bill: That was pretty good! Triumph vertical twins have both pistons going up and down together. The flywheel sits between the rods, leaving a long distance between the main bearings on each side. The early crankshafts (three-piece crankshaft with the two crankpins bolted to the flywheel) had a reputation for being kind of "wimpy" and sometimes breaking. What kind of crankshaft did you use?

Alp: At first, the early three-piece crankshaft; I didn't have any trouble. Before long we went to the later one-piece crank, which interchanges in the early cases; and no doubt it is a much stronger unit. I have to say that we have never used anything but original Triumph cranks and they have held up fine in my very powerful fuel engines.

Bill: The Triumph Twins were noted for vibration, how do you get along with that?

Alp: True, there is vibration, but I have worked out a balance factor which minimizes it.

Bill: What red-line do you use?

Alp: I gear them for 8200 at the lights on gas, but for fuel I try to keep it to 7500-7700. Nitro makes so much torque you don't need to spin the engine as fast, and less rpm means less wear or breakage.

I use the original pre-unit Triumph gearboxes; but although I have never had any breakage of the gears, shafts or bearings, something goes on inside them in the gears I don't understand. The gear boxes tend to lock in the gears and not want to shift over about 5000 rpm; so I shift early and get into top gear, then let the engine pull us to the high revs. The gearbox is an old 1930s design and people say it has one gear and four neutrals. It is true that for some reason, the shifter camplate does have a neutral notch between each gear. Almost all other bike gearboxes have a neutral notch only between first and second. Triumph made close-ratio gears for road-racing, but we found the standard road ratios are close enough for my purposes.

Bill: It strikes me that the layshaft gears are possibly being forced a few thousandths or more out of true, due to shaft flexing. This may be upsetting the

shift fork and camplate operation. Maybe this accounts for the binding you have in shifting, but I agree there is probably nothing practical you can do about it. You are putting torque through the gearbox the designers never dreamed of; but those old gear boxes seem to be able to take it. In top gear the main shaft and clutch shaft are locked up; and the gearbox runs 1 to 1, with the internal parts just spinning essentially without load.

What kind of gearbox oil do you use?

Alp: Klotz sponsors me for all lubricants and I use their 75W-90 synthetic gearbox oil.

Bill: Con-rod breakage is always a risk with high-revving engines, what kind have you used?

Alp: Both steel and aluminum rods, from MAP Cycle and Thunder Engineering. I consider one as good as the other, and haven't had any failures.

Bill: I see what looks like a Morris magneto on your engines, is that right?

Alp: Yes, Morris is one of my sponsors, and their mags work perfectly for us. We use them with fixed timing.

Bill: This shows once again that a traditional magneto, which produces maybe 10,000 volts is perfectly adequate to light up the fire in any racing engine. Except perhaps a blown fuel unit running very rich, loaded with fuel vapor and spray, with extreme cylinder pressures. What spark lead do you use on gas, and on fuel?

Alp: On gas, 36-38 (advance) suits the very high compression we use of 12.5 to 1, with race gas, on fuel, more.

Bill: How much "more"?

Alp: Ahhh, I think that is one detail I should not share, since it is so critical to the power and reliability of a fuel engine!

Bill: (chuckling) Okay, I understand. With the deep Hemi combustion chambers like the Triumph uses, (which date perhaps from the 1920's) the tradition is to use a lot of spark lead with nitromethane blends. perhaps as much as 60-70 degrees. Plus we hear that today's NHRA Top Fuel and Funny Car engines run with that much. Their cylinder heads still use these deep Hemi combustion chambers, based on the 426 Chrysler Hemi. I understand the '51-'58 Chrysler Hemi used a shallower chamber so people used less spark lead. How do you start your engines, with fixed timing and so much spark lead? Do you have trouble with them kicking-back?

Alp: We use a Pingel starter, on 24 volts. It engages with a cog on the end of the drive side mainshaft. With the mag off, you spin the engine with the powerful starter. Then with a gas prime on the gas engine, I flip my ignition on when it will start easily.

With the fuel engine and the big load of nitro, you have a much more hazardous situation. If you do it wrong, you can break your rods, pistons, crankshaft, case, everything with one nitro explosion in the cylinder! Our technique is to spin the engine with the starter, mag off of course, nitro valved off from the tanks. Then Jalika sprays methanol at the carburetor intakes, while I hold the throttle. I click the mag, the engine fires easily on the methanol; and she continues to spray the methanol in the carbs. I keep the engine running with the throttle, and after a few seconds, I turn the nitro valves on and the exhaust turns to THUNDER! Very exciting! Immediately after the Starter gives me the nod, I launch in first gear and make my pass.

Bill: No time to warm up the engine or the oil?

Alp: No. It is not necessary; in fact we want to go like this to take advantage of the heat-sink capability of the engine. Unless I miss the tuneup and get a leanout. (which heats the engine almost instantly) after a normal pass at El Mirage or Bonneville, you can still put your hand on the cylinder head! I never want a leanout; because if we get one, we automatically get a hole in the piston crown!

Bill: Will you reveal for us what percentage of nitromethane you are using with your methanol recently?

Alp: Variable around 98%.

Bill: What kind of pistons do you use nowadays? After starting with the NOS Hepolites you mentioned before?

Alp: I still have a collection of NOS Hepolite and Robbins pistons. When I run out of them I will order modern forged pistons.

Bill: This is very interesting! What kind of oil and pump do you use?

Alp: Here again Klotz sponsors me for their nitro racing oil, which is a blend of synthetic and 20% castor. It is not thick when it is cold. I don't know what the viscosity rating is. It is for racing only, and the can doesn't say. I use the standard Triumph oil pump, with about a quart of oil in circulation. With this treatment, taking off with cold engine and oil, examination of the parts on teardown shows everything is getting good lubrication. But of course as everyone knows, nitromethane blends contaminate the oil almost instantly. Jalika has a regular routine of changing the oil, and flushing the entire system after every pass. It gets a nasty creamy mustard color from the nitro.

Bill: I noticed that you use a belt drive for your primary rather than the original chain. That means you have to have an effective oil seal on the crankshaft to keep the oil inside.

Alp: Yes, we use a Bob Newby belt drive and his clutch, which are made in the UK and very well proven. I have a heavy-duty version of the clutch to give the torque capacity we need for the fuel engine. The vintage original crankcase doesn't have an oil seal there, so I had to design one. Obviously we can't have oil coming out to contaminate the belt and the clutch. The only trouble about the Newby items, is the delay in getting parts over from the UK.

Bill: Clearly with such high compression as you use, 12.5 on both your gas and your fuel engine, the internal chamber pressure on the firing stroke rises to a very high figure. The fuel engine particularly, the pressure must be tremendous. What form of head gasket do you use to hold all this pressure reliably? The original Triumphs used a dead soft thin copper sheet gasket. The earlier ones had eight cylinder head bolts, the later ones added another bolt between the cylinders.

Alp: We use no head gasket at all, Bill. We lap both the heads and the cylinders, dead flat on a surface plate with grinding compound. This is done until we see a perfectly smooth, flat sealing surface. We use the original Triumph 3/8" bolts, as you say eight on the early iron head, and nine on the later alloy Triumph head. We have had no trouble with leaking at the head joint. The Vintage engine has its iron Triumph cylinder barrel, and the Pushrod-class engine uses an aluminum cylinder. The aluminum cylinder (from Triples Rule) has sleeves from Northwest Sleeve. Thunder Engineering is in UK and Triples Rule is an American company. Both companies sponsor me, and have been very good to us for parts. I'll give you the whole list of my sponsors before we finish this story.

Bill: No gasket at all! Very interesting. I recall from reading many years ago that in the '50s some drag and Bonneville racers would lap their iron Hemi heads to their block. They would seat them with grinding compound to get a good flat mating surface, and use no gaskets. I see nothing wrong with it, but we hear nowadays that the NHRA Hemi racers use dead-soft copper sheet gaskets. Crew chiefs use various thicknesses to adjust their compression ratios. We hear the gaskets sometimes give way under the pressure. With the 90% nitromethane and manifold pressures up to 40 psi from their huge blowers, we can understand this!

You have told us that your cylinder head joint holds the pressure with both surfaces lapped dead flat on a surface plate. That tremendous peak combustion pressure pushes up just as hard on the cylinder barrel, trying to rip it out of the crankcase! The cylinder is fastened to the crankcase by a set of 3/8" studs. Have you had any trouble with the cylinder pulling the studs up? Do they ever break them, or strip the threads? If you should get into a detonation situation with the fuel, or if there should be a hydraulic lock due to over-fueling somehow, the stress on this point would be huge.

Alp: Your analysis is all correct, Bill, but neither the original Triumph crankcases nor the Thunder Engineering sandcast replacement I use for Pushrod class, have given any trouble in this respect.

Bill: I noticed at one point a couple years ago, your engines started to sport the beautiful Amal GP racing carburetors. What size are they and how did you come by them?

Alp: Once we started to build up a number of records, we put some portfolios together to send around to a number of prospective sponsors. You realize, Bill, that even a low-bucks operation like ours still takes quite a bit of money to run. Just going out to the meets with meals and lodging is costly, not to mention buying parts to build the best equipment you can for your classes.

We were so happy with the positive response we got! Among all the others, Burlen Fuel Systems in UK (who had bought all the name and manufacturing rights to the older SU, Zenith and Amal carburetors) sent us two pairs of 1-3/8" Amal GP carbs, together with the matchbox floats for them. We have used them on the gas and fuel engines ever since.

Bill: The Amal racing carburetors made from the 1930s through to the 1970s were ALWAYS a thing of beauty and a joy forever! It made you happy just to see one. Amal's marketing pitch for them was "The Carburetors of Records and Successes". That is exactly what they were, enormously successful in road-racing, sprinting, and speed trials. They were used on all manner of engines made in the UK for their period. For just one example, Amal T.T. carburetors were used on the Burns and Wright Vincent Black Lightning. It took the FIM World Record at 185 mph in New Zealand in 1955.

However, I have heard that they were never too easy to use with large percentages of nitromethane. This is because the float chambers and jetting were designed more for gas and methanol. They were a little short of flow capacity for the needs of nitromethane.

Alp: That is true, Bill, and although perfectly suited for my gas engines, I have been working on a different fueling concept for the fuel engines.

Bill: Which is...?

Alp: The idea is using direct flow from the tanks to the carburetors, doing away with the float chambers altogether. With this approach, I would use a two-stage restricted system. I start up and run the engine on the course up to 5000 or so. Over that when I go into high gear, I manually open an auxiliary valve to increase the flow. This will give the engine all the fuel it wants for maximum power at high rpm. With this method; you have to be right, and quick on the fuel control. If you don't shut off the fuel at the lights, you could easily hydraulic the cylinders and blow the engine up! With such high compression there is very little volume in the cylinders; and hydraulicing would be very quick.

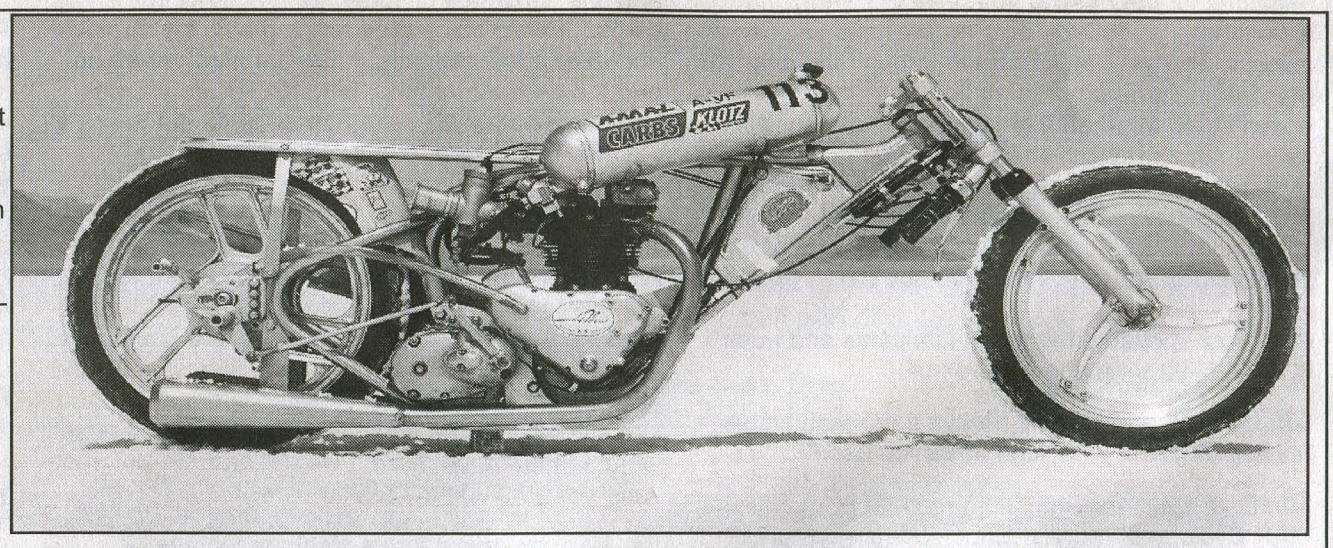
Bill: I see, then the carburetor becomes something like a gravity-fed fuel injector. It would be a delicate matter to get the flows just right, not too much nor too little fuel!

Alp: (chuckling) You are so right, Bill, this is where the careful design and management comes in. It is not overstating the case to say if you want to get records, you have to work just that little bit HARDER than your competitors!

Bill: Alp, I can see that you and Jalika have worked long, and devotedly. You've earned all the success you have already had, and more power to you.

I think we have a pretty good understanding of the outlines of your program so far. What are your plans for the future?

Alp: Right now we are looking at building an entirely new design of frame and bike fairing, for Partial Streamlined class. This will hopefully put our 650 Fuel A bike up over the 200 mph mark . But Bill, before we finish up I must give you the names of my sponsors. They have all been so good to us and we couldn't do this without their support. We are SO GRATEFUL. In alphabetical order they are:



Here is the latest form of Alp and Jalika's 650 Class A nitro Triumph beautifully photographed at Bonneville.

Amal Carburetor
Kibblewhite Precision Machining
Klotz Synthetics
Lowbrow Customs
Morris Magnetos
Thunder Engineering
Triples Rule
WebCam Racing Cams

Bill: Okay, Alp, thank you so much for all this fascinating information. Now let's go over to Jalika for her part of the story.

JALIKA GASKIN

Bill: Jalika, thank you for agreeing to this interview. The El Mirage racers tell me that you and Alp are very popular at the meets. Everyone likes you, and your records are respected by all!

Jalika: Thanks for saying so, Bill. We have a wonderful time at El Mirage, as well as all the Milers club meetings. When we go out to El Mirage or Bonneville, we go out there to set records, and of course that is top priority. But when we've made our record for the day, we can relax and enjoy the social life with all the interesting folks there. We feel towards Ralph Hudson and everyone else there, like we are all family. Doug Robinson in particular has been like a kind uncle to Alp and me.

Bill: Alp told me you are a model as well as an artist. Have you done modeling work there in Los Angeles?

Jalika: I did quite a few modeling jobs internationally; and in NYC as well as a few other cities in the US. In Los Angeles I did well landing covers and campaigns, etc. but that world is all-consuming if you are serious about modeling. I had fun with it, but by the time I moved out to L.A. knew I wanted my life to go in other more creative directions.

My background was originally in culture and art, as I grew up in an artistic and multicultural/lingual household. I developed an appreciation for the antique, so naturally it was really exciting to have the opportunity to dive into a field that combined so many of the things I am drawn to in one! With Alp in the studio/shop, going to the meets, and doing my
artistic pursuits, (when there is spare time) I feel fortunate to indulge in learning and creating something every day, in one form or another. I have a vintage 1950 Singer sewing machine, and use it to make decorative art work. My creations are inspired by my family's West African and Native American background, blended with what I like to call 'Badlands Beauty'. I use the Americana/Southwest landscape we see during our trips out to the desert for the races. I also do painting and drawing. I enjoy exploring various materials on my own, however the core focus of my studies is in Jewelry and Metal Fabrication.

I have a flair for mechanical things, and work right along with Alp in the shop when we are building equipment. At the meets I do the Crew Chief work, help him start the bike and make the pass. Afterwards I change the oil , clear all fuel/oil lines, everything the crew does to support the rider and ensure the bike is ready to go!

Bill: Do you have a background of riding motorcycles yourself?

Jalika: In 2010 I got a Honda 750 to ride, and got some experience. Over the years Alp and I gathered enough vintage Triumph parts and built a pre-unit 650. You may see me riding around at El Mirage when there is free time. Alp got an old Harley twin basket case to build for another cheap desert bike. We are going to ride them out in the desert together. The mountains and the desert in California are such wonderful, spiritual places to ride around in that we absolutely love them.

Bill: Jalika, thank you so much for talking with me, and I know readers will enjoy getting to know you and Alp a little better. You provided us some beautiful photography to use with this article and that always adds a lot.

Best of luck to you and Alp going forward and thanks again for doing this story.

Jalika: Alp joins me in saying thanks to you and Wendy for your interest, Bill! It was our pleasure.

End