

DAY BY DAY...A JOURNEY DOWN THE 91MM RANGE – BY MAX STONE

INTRODUCTION

Victorinox list thirty 91mm Medium Pocket Knives on their home web site, so I thought...mmm...sounds like a 30-day Challenge!

Seeing I have (almost) the complete range, I decided to give it a go.

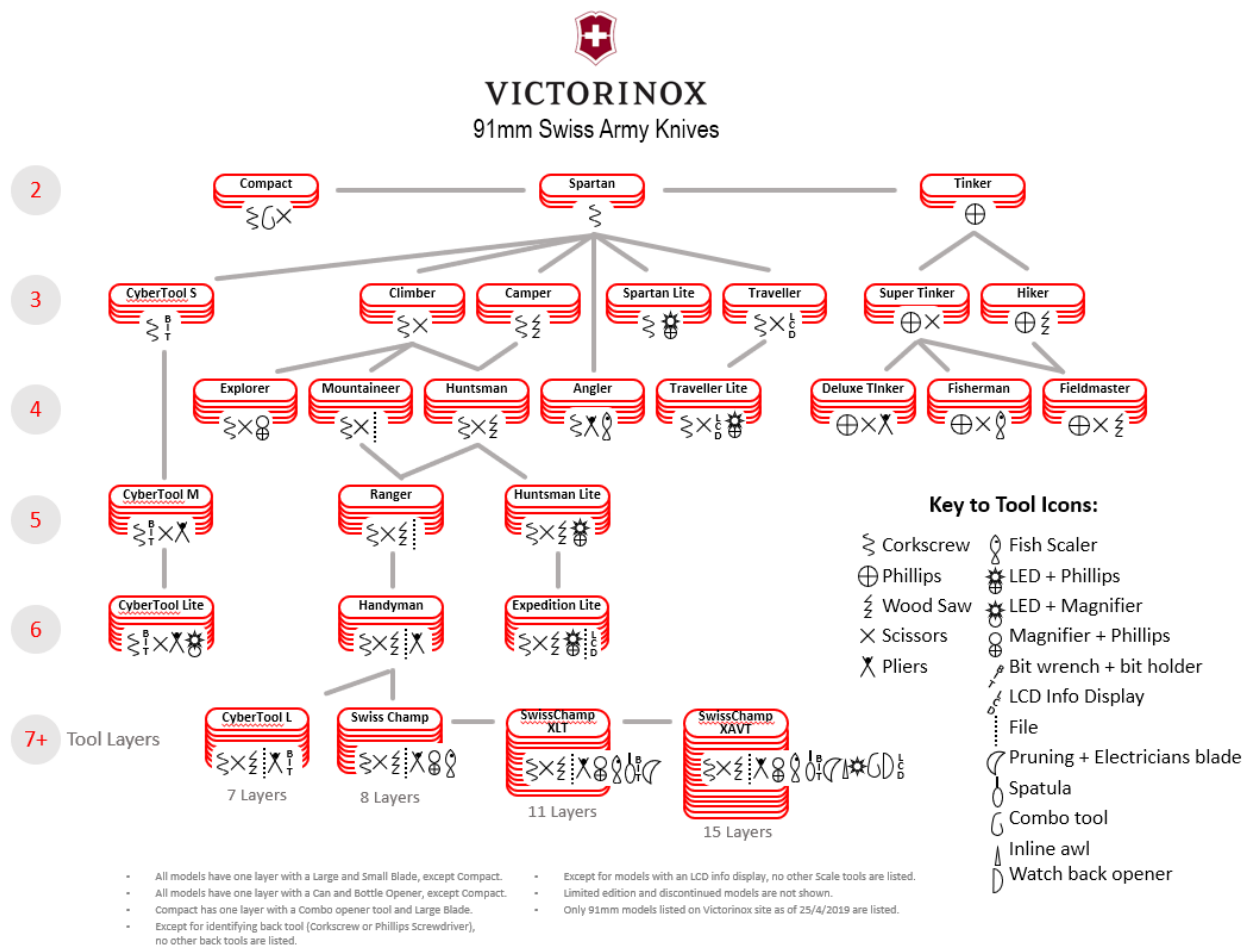
So this will be my 30 Days and 30 SAKs Challenge, with a post of a different SAK each day for 30 consecutive days.

The spin is that it will be only 91mm SAKs, and I will follow the current range layer by layer, starting with the Compact tomorrow.

For those eagle-eyes, yes, the current 91mm range is actually only 28 knives as Victorinox list two Swiss Champs separately (Silvertech and Red), and technically, the Traveller Set is a Huntsman with Plus scales.

This challenge will overlap the September Modified SAKs Challenge, but I don't mind carrying two SAKs, and it will be fun to compare a different current SAK each day to my Yeoman WS mod.

Below is a diagram showing the 91mm current range so you have an idea of the journey and can follow along.



DAY 1 - COMPACT

The 2-layer Compact is the sole representative in the current 91mm range that has the Combo Tool instead of the opener layer. Victorinox had others in the past, with interesting names like 'Scientist', 'Engineer' and 'Yeoman', but sadly these are all discontinued.

The Compact is a compromise of size vs. function, saving a layer but replacing the small blade with a tool intended to do multiple tasks.

The Compact is a popular EDC carry, especially for light-duty/light carry. The fact that it is vastly outnumbered by its more capable 91mm brothers should not detract from its abilities, especially in the size department, and that it has the excellent Victorinox scissors in the second layer.

Almost unique to the Compact, Victorinox added a small file area to the back of the Hook Tool. Not

much use for more than touching up a rough fingernail, it is nevertheless a useful addition to this SAK.

The Compact also sports Plus scales, adding the useful pen into a slot on the bottom scale. Victorinox also adds the pin and mini-screwdriver accessories as standard.

Pros:

- Small and light
- Smallest 91mm to have scissors
- Plus scales

Cons:

- Combo tool is a compromise
- No small blade
- Expensive

Bottom line:

The most capable of the 2-layer 91mm SAKs, but overshadowed by the more popular Climber.



DAY 2 - SPARTAN

The Spartan is a 2-layer SAK that really defines the whole 91mm Victorinox range, having the base tools that almost all other Victorinox knives have.

The first layer holds the large and small blade, while the second layer holds the openers that also do duty as screwdrivers. The back tools include the ubiquitous corkscrew and awl.

Starting life, in its current design, known as the Standard, the Spartan has essentially the same tools as the original Officer's Knife going back to 1897 (SAKWiki image below), so owning a Spartan is in a way, owning a little piece of history.

Most 91mm SAKs are based on the Spartan. The openers and blades stay as the outside layers, with new layers and tools added in between.

Benefiting from being only 2-layers, the Spartan almost disappears in any pocket, but still has some of the most useful tools on a SAK. It is the most popular 91mm SAK, and the most affordable in the range.

Pros:

- Easy to carry
- Good set of essential tools
- Very affordable

Cons:

- Only covers the basics

Bottom line:

The closest to the original Officer's Knife, the Spartan represents the core values of a Victorinox SAK; compact, versatile and affordable. The Spartan rightly holds the spot at the top of the family tree as the original 91mm SAK.



DAY 3 – TINKER

The Tinker is the last of the 2-layer SAKs in the 91mm lineup I'm reviewing. Basically a Spartan with a Phillips instead of a Corkscrew as a back layer tool. Arguably a more practical tool load than the Spartan, as there's probably more opportunities to use the Phillips driver than the corkscrew, unless you're a wine buff!

Of course, the ergonomics of using the Phillips is rather compromised, being a back layer tool...but the driver tip is well-made and it will engage a decent sized screw head, as long as you've got room to access the screw.

As a (slightly) more modern SAK, the Tinker loses a

bit of character compared to the iconic Spartan, and for practically, the Super Tinker with scissors is probably a better option. But the Tinker's a good option if you're looking for a smaller 91mm with a dedicated Phillips.

Pros:

- Dedicated Phillips
- Small and light

Cons:

- Phillips awkward to use
- Limited tool set

Bottom line:

A popular alternative to the Spartan, sporting a Phillips driver, but unless you must have 2-layers, the Super Tinker is a better option.



DAY 4 – CYBERTOOL S

Over half the 91mm range is made up of 3- and 4-layer SAKs, clearly the market sweet-spot. In many ways, the 3 layer SAKs provide the most interesting options, as you are typically picking just one extra tool to squeeze between the blade and opener layers. You have to be just that bit more selective in your choice, and these SAKs have strong identities linked to their individual characters. There are just four of these middle layer options available; scissors, wood saw, inline Phillips/LED, and a bit driver.

It is the bit driver SAK that gets our attention today, known as the Cybertool Small.

Originally called (and still by many), the Cybertool 29 (for 29 functions), the CT-29 sports one of the most recent tools created by Victorinox; a bit driver that accepts interchangeable, reversible bits.

And there are two party-tricks the CT-29 has up its sleeve; the bit driver is a decent length, giving a reach not far off a full-sized screwdriver, and the CT-29 stores another three bits in a clever swing-out holder that tucks under the driver, each reversible, giving this SAK a total of eight interchangeable

options.

Marketed as a tool for computer geeks, the Cybertool is really just a more modern alternative to having dedicated, separate tools. A route also taken by other manufacturers, such as Leatherman and Gerber.

The CT-29 has bigger brothers that we will cover in later days, but even as a 3-layer SAK, the CT-29 is quite wide due to the bit driver. It's actually a little thicker than the 4-layer Huntsman, making it just about pocketable (but noticeable) for EDC.

Pros:

- excellent interchangeable bit driver
- Still has the core Spartan tools
- Supplier with Plus scales

Cons:

- More like a 4-layered SAK in size
- Limited to the bits that you get with it
- Expensive

Bottom line:

A fairly significant innovation for Victorinox, the Cybertool adds a tool that is almost as good as a dedicated bit driver, while maintaining the already capable Spartan tool set. Just a shame the driver is incompatible with generic 4mm bits.



DAY 5 – CLIMBER

So the next on our journey is one of the most popular Victorinox SAKs; the Climber.

Adding the excellent Vic scissors to the base Spartan tool set creates a SAK that is ideal for pocket EDC when you want to keep to a maximum of 3-layers. In fact, three out of the seven 91mm 3-layer SAKs available sport scissors in their middle layer, so there's no doubt that this is a popular option.

And it's this popularity that gives the Climber some competition in its weight class. You could take the Traveller that's got identical tools but adds a useful multifunctional digital display...or the Super Tinker that switches the corkscrew for a Phillips driver. Not forgetting the Compact that can do much of what the Climber can do...but with one layer less.

So the Climber has some very capable competitors eating into its market share.

That said, the Climber remains a firm favorite as a no-nonsense SAK with the most essential tools needed for general purpose EDC.

You'll also find one of the biggest ranges of scale options on the Climber, including some very attractive limited edition and special release models. In fact, it's quite possible that you could be kept very

busy just collecting Climbers (and earlier historic versions).

Of course, the scissors also bring another tool to the party (at least since 1991); the multipurpose hook, placed as a back tool, and the cause of much debate among SAK users. Personally, I've never used it to carry bundles of magazines, to tighten boot laces, reattach trampoline springs or lift a pot off a camp fire...but it's good at any of these and many more undefined uses, so it's really not an issue for me. It just adds a little more usefulness to an already very capable little pocket carry.

Pros:

- Versatile and effective scissors
- Still small enough for pocket EDC
- Large range of colours and designs

Cons:

- Not much

Bottom line:

As a general purpose, pocketable SAK, you really can't go wrong with the Climber. Sure, you can go a layer less with the Compact, but you lose the small blade and dedicated openers. The only real alternative in the 3-layer category is the Super Tinker, if you're OK with the ergonomics of the back Phillips.



DAY 6 – CAMPER

The saying “...use the right tool for the job” is just as relevant with a Swiss Army knife. Many a SAK user has witnessed the twisted blade tip or damaged scissor edge from misuse; damage that is avoidable with just a little user care and awareness.

And while the scissors and screwdrivers are useful tools for the urban jungle, the picture changes when you step out your back door or venture off the beaten path.

This takes us to the next SAK up for a mini-review, the Camper. Like many, I love the outdoors. Being closer to nature and needing to be self-sufficient (even if just for a few days) is soul-food and probably the best way to disengage from the hectic lifestyles many of us lead.

The Camper adds an essential tool for the outdoors, the wood saw. And it's not some compromised tool just for emergency use. No, the Victorinox crosscut wood saw is an extremely effective cutting tool that can handle up to a one inch cross-section with ease. There are several reasons why this saw is so effective, so a little background is called for. There are four characteristics we can touch on; Pitch, Rake, Fleam, and Set. Pitch is simply the number of saw points, or coarseness of the saw, which in turn defines how deep the gaps are between the teeth. This is a big factor in how efficiently the tool carries saw dust away from the cut, or kerf. The Vic wood saw has a relatively course pitch optimized for wood, but equally good at cutting PVC piping and other soft but stable materials.

Rake is the angle of the cutting face of the tooth and determines the aggressiveness of the cut. The more gentle the rake, the easier the saw is to push. So starting the cut is easier but progress is slower. A steeper rake cuts faster but can feel grabbier. It also takes more care to get started as the blade can hop around on the wood before getting established in the groove. The Vic saw has a well-balanced rake that is the same angle front and back, making it efficient regardless of pushing or pulling on the saw. Fleam is the angle across the face of the tooth in the cut direction. It makes every tooth a little knife that

slices the grain rather than chopping it like a chisel. The more fleam the cleaner the cut but the weaker the tooth. If you look closely at the Vic saw, you can see that each tooth is a miniature knife allowing an extremely effective cutting process, much like the teeth of a shark. In fact, the side-to-side action a shark uses is the same technique used by your Vic's saw to cut wood.

The final characteristic is the 'set' of the saw. This is the amount of offset the teeth have to either side of the tooth line, or how far they are bent outwards to widen the kerf and allow the saw to run without binding. However, the wider the kerf the more wood you remove, so progress is slower and less precise as the saw can now wiggle about. This is why joinery saws always have less set than general purpose hand saws. The Vic saw has a very slight set that is not immediately apparent; but on close inspection you will see that the back of the saw blade is slightly thinner than the saw's edge, creating a slight set once the teeth are machined into the blank tool. And an often overlooked reason why the Vic saw is so effective is the thinness of the blade. Removing less wood simply makes progress faster. All-in-all, the Vic saw is a marvelous example of a well-designed and effective tool, truly optimized for folding away and keeping in your pocket. Give that some thought next time you're using your Camper in the great outdoors!

Pros:

- Excellent saw for small diameter wood
- Small enough to carry in any pocket
- Very affordable

Cons:

- Won't replace a full-size saw for bigger jobs
- Cleaning the saw can take time

Bottom line:

Fire and shelter are two essential requirements when away from your urban environment, and the Camper with its capable saw can be a real help in these two and many other requirements. There's really no excuse not to have a Camper or any of the saw-equipped SAKs close at hand when out and about.



DAY 7 – SPARTAN LITE

So far we have covered Vic's scissors and wood saw as the central tool options in the 3-layer 91mm lineup. Both excellent tools, driving good demand for their respective owners, the Climber and Camper.

But there's another tool that gets a lot of interest from SAK users; the inline Phillips screwdriver. And this tool gets our attention today, as we're covering the Spartan Lite.

Bit first, as the name implies, we have to deal with a rather questionable feature. Victorinox introduced a small LED flashlight into their 91mm lineup some years ago. Running on two button cells, the output is hardly stellar, and while it has become brighter in recent years as LED technology improves, it's never going to be more than a few lumens...enough to help you find a keyhole on the dark, or help you avoid tripping on a dark stairway.

I use my mobile phone as a flashlight when needed, or I carry a small AA Fenix if I know I may need one ahead of time. So for me, having a tiny LED on a SAK is largely a waste of time, especially as it means you cannot deep rinse the SAK for cleaning, and you can't remove the LED if you want to illuminate what you're trying to use the SAK for in the dark, the very time you would need a low-output flashlight! There's a 6-layer exception, but that's for another day. But for the rest of the 'Lite'-equipped SAKs, the LED is a non-feature in my book.

So with that out the way...let's return to the tool tethered to the opposite pivot; the inline Phillips. And as bad as the LED is as a flashlight, the Phillips is at the opposite end of the spectrum, because it's really good!

Unlike the ergonomically-challenging Phillips found as a back tool (like on the Tinkers), the inline Phillips snaps out to become a pointy one inch extension of

the SAK, with a good-sized cross-head and strong (4mm) tool thickness. It even has a 90 degree detent, for increased torque or for difficult-to-reach spots. As an extra bonus, the inline Phillips is perfectly central in this 3-layer SAK, making it super-easy to rotate in your hand (did I hear someone say Yeoman mod?)

Actually, the inline Phillips is such an A+ tool, you can overlook the F- tool its paired with on the Spartan Lite. Sadly, with the extra cost and questionable LED, the Spartan Lite often gets overlooked. Even if they sex-it-up with a mini screwdriver accessory and transparent scales.

Of all the paired tools in a SAK layer, the inline Phillips and LED probably top the list for 'best and worst' implementation of a dedicated, stand-alone tool.

But when all is said and done, the Spartan Lite still has a great base toolset and an excellent inline Phillips, so it's still a great SAK for pocket carry. Maybe switching the button cells for some headache pills would be more useful, especially if you bump your head on the dark.

Pros:

- Excellent inline Phillips driver
- Still a Spartan under the skin

Cons:

- LED all but useless and cannot be removed
- Expensive Spartan upgrade

Bottom line:

Much overlooked, the Spartan Lite has the best implementation of an inline Phillips on any current 91m SAK, but made almost completely redundant by the 4-layer Explorer that ditches the useless LED for the (slightly more useful) magnifier, while adding scissors.



DAY 8 – TRAVELLER

The last 3-layer with corkscrew I'm reviewing is the Traveller. This is really just a Climber with a digital top scale.

As I reviewed the Climber a few days ago, I'll focus on the digital side of this SAK. Grab a cup of coffee, there's a bit of reading here...

Victorinox used to have two different digital scale options in the 91mm range; one for time functions (the Voyager), and one for atmospheric measurements (the Altimeter). Presumably Victorinox took the opportunity to combine both when they were forced to do a redesign, possibly due to an EOL component such as the LCD display. Today we are left with just the Traveller in the 3-layer range.

The digital scale uses a real-time clock, powered by a single button cell, to keep time. Functions include hour:min display, with PM icon or 24-hours...but no seconds.

It also has a single alarm function with a basic 'beep...beep...beep' sound that may (or may not) wake you up.

In keeping with all good digital timepieces, it also has a countdown timer that can be set to count down to a beep...beep alarm, from 9hrs 59min, and including seconds below 10 minutes.

And it also has a stopwatch that counts up in seconds, without any sub-second recording (sorry, no chance to do the Casio start/stop reflex test here...)

Timing functions run independently, so you can time your hard-boiled eggs while you check how long the toaster takes to pop.

Rather than spoil the sleek lines of the SAK with protruding buttons, Victorinox cleverly engineered

the button into the shield on the scale. Yes...just one button.

Pressing and releasing it steps through the various functions, with a little icon on the top row indicating the mode you're in. Round clock face, wind-up alarm clock, ding-dong bell and old-fashioned stopwatch.

Holding the button down in any of the time modes does two things. After 1 second, the back-light comes on for a few seconds (electroluminescent). Keeping the button pressed for a further second will cause it to beep once and enter the setting mode, or starting the stopwatch if in that mode.

Now the fun starts! As there is only one button, the display shows a little up arrow, allowing you to advance the time (for the clock, alarm or timer), either by press/release (single step), or by holding in (fast and after a few second, faster). If you pause and release for 2-3 seconds, the arrow automatically changes to point down, and now you can press the button to step the values backwards. If you do nothing, you get another chance (2-3 seconds later) to increase again as the arrow switches to up, and one final time down again. If you wait for the arrow to cycle up/down, you can press and adjust the time up and down indefinitely (or until the novelty wears off). Once you're satisfied (if not a bit confused), you simply wait the 2-3 seconds without pressing the button, and the value is set. Confusingly simple.

Starting/stopping the stopwatch is a similar press-and-wait affair. The stopwatch will run 2 seconds behind the event you are timing due to the press/hold requirement, but the 2-second stop delay (also needs press/hold) means the timing will be accurate overall...somewhat clever.

Press/hold for a few more seconds resets the stopwatch.

Using just one button for all this functionality is quite challenging, and can test your patience. But with a little muscle-memory and practice, it begins to make sense.

Independent to the time-keeping circuitry, the digital scale also includes an atmospheric pressure/temperature sensor. This is utilized to calculate the estimated altitude (selectable in m or ft), barometric trend (weather forecast) and temperature (selectable in C or F).

Pressing the single button cycles through these three functions, but mixed in-between the timing functions. For some reason, Victorinox chose to have the order Time/Altitude/Baro trend/Alarm/Timer/Stopwatch/Temperature. A little triangular Matterhorn mounting icon for altitude, the word 'baro' for the weather trend, and no icon for temp, as I guess the degree C or F gives it away.

Press/hold in these modes also allows setting. In the altitude mode you can set the altitude to a known reference and tell the system what algorithm to use to calculate the altitude based on the measured pressure and temperature (standard, hot or cold climate). You can reset the barometric trend graph and adjust all the units when in the temperature mode.

The circuitry is fairly basic compared to some sensor-equipped watches. You cannot tell the system if you are stationary (so that pressure changes are interpreted as weather-related), so the barometric trend graph is only accurate if your altitude is relatively constant over a few hours. This also means that the altitude value will drift at one location as pressure varies due to weather.

But the sensor is extremely accurate at measuring pressure, and when calibrated (against a GPS altitude), it gives accurate readings. Just climbing one flight or stairs will show a change, and the readings across 2 devices are never more than a couple of meters apart.

The temperature needs a good half-hour to adjust from pocket to ambient (similar issue with watch-based sensors), but is also accurate to within a couple of degrees when compared to other sensors

that I have.

Overall, the seven modes are quite useful and not too gimmicky. If I had the chance to suggest improvements, I'd change the bell icon to an hourglass as it's easy to confuse the bell (timer) with the alarm clock. I'd also add the option for a hourly beep as this hardly uses any power, but is a nice reminder as time goes by. I'd also add a light sensor so that the press/hold does not activate the backlighting and drain the battery, unless it's dark. But these are small gripes and don't detract from the usefulness of this device.

While I've been tempted to pop off the digital scale (it appears to attach the conventional way), there are no tool recesses (tweezers, etc), so I'd likely damage the scales's plastic edge or twist the circuitry which would not be good. Fortunately, the scale is transparent, although frosted, so some of the electronics are visible for the curious onlooker.

The LCD display has a really tough plastic window overlay, clearly beefed-up to prevent damage for knocks and drops. It's also slightly recessed, reducing scratches when the SAK slides around on its top scale. The digital scale is a couple mm thicker than a normal scale, but it's hardly noticeable and in this Climber version, does not affect its carry-ability.

With some design genius, Victorinox managed to squeeze all four Plus tools on the non-digital scale by using slightly shorter tweezers that are stored in a slot on the opposite side to the pen and toothpick. Vic also include the pin and mini-screwdriver with the digital Climber (sorry, Traveller).

One consideration is that you can never let the Traveller get wet. The electronics and battery compartment are not sealed so it could be easily damaged by water ingress if dropped in a puddle. This also means that the standard soak/rinse cleaning method is a no-no. As a side note, water generally damages low-voltage electronics not from short-circuits, but from electrolysis corrosion. Equipment can be saved if you remove the battery

immediately on water contact, and dry the circuitry fully. Something worth remembering if you accidentally dunk your Traveller.

Pros:

- Fun digital features that actually work
- Digital scale is built to be tough
- Climber tool set always a winner

Cons:

- Single button interface can be frustrating
- Not sealed against water
- Very expensive for what it is

Bottom line:

While there's really no need to have a digital timepiece with atmospheric sensors on your SAK, it's a fun addition that adds to the already excellent "fiddle" quality of any SAK. Makes a great gift or as an emergency egg timer.



DAY 9 – SUPER TINKER

The next 3-layer SAK we tackle is the well-known Super Tinker. A most fitting name, with Victorinox adding scissors to the central layer of the classic Tinker design.

Effectively a Climber with a Phillips driver replacing the corkscrew, the Super Tinker is one of the more popular of the 3-layered SAKs in Vic's 91mm range.

Arguably the more useful back tool, the Phillips cross tip is a decent size and will engage all but the smallest Phillips screw heads.

However, the problem is that the driver only extends 38mm (1.5in), and with the 'T'-shaped deployment position, ergonomics are somewhat challenging. This back tool layout is fine to extract corks, but less than ideal for driving screws. This may partly explain why there are only six 91mm SAKs with it, compared to 22 with the corkscrew.

The Super Tinker is a little sleeker to carry compared to the Climber, as the Phillips tucks into the body of

the SAK much better than the corkscrew. But then again, you cannot attach the mini screwdriver accessory as you can with the corkscrew.

There's also something to be said about the 'look' of a SAK. In many ways, one with a corkscrew just looks nicer than the Phillips equivalent. Many may disagree or not consider this important, but there is a little more history and nostalgia with the corkscrew versions.

Pros:

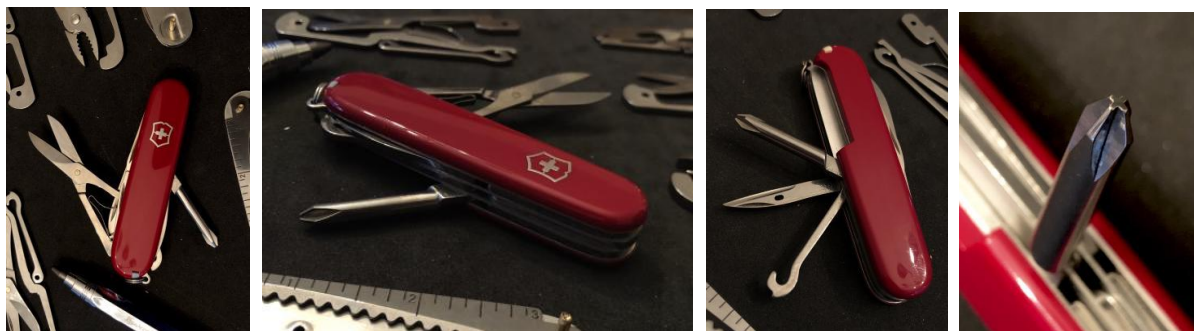
- Phillips more useful than a corkscrew
- Excellent scissors
- Affordable pocket carry

Cons:

- Phillips can be awkward to use
- in-line Phillips is better if you need this tool

Bottom line:

An extremely capable little SAK that sits right in the sweet spot of function, affordability and size. Does not have the same charm as the Climber, but probably the more sensible choice.



DAY 10 - HIKER

The last of the 3-layers in the current 91mm range is the Hiker, and really can be viewed as a Camper with a Phillips back tool instead of the corkscrew.

The Hiker brings a good alternative for those wanting a SAK with a wood saw for pocket carry when off the beaten track, but don't see the need for a corkscrew.

Personally, I think there's more chance of needing a corkscrew when you're away from home and the kitchen draw, so it's maybe a less convincing argument to marry the Phillips with the wood saw.

In days past, Victorinox had many more 91mm SAKs with the back Phillips, but they only added the wood saw to the 5- and 6-layer versions. The Hiker and it's

4-layer saw/scissors Fieldmaster brother, are the only saw-equipped models in the current 91mm range with the back Phillips. All the 5- and 6-layer models are discontinued, so these two are your only options if you want this combination.

Pros:

- Great wood saw
- Small and lightweight
- Very affordable

Cons:

- You may miss the corkscrew, but maybe not

Bottom Line:

Like its Camper cousin, the Hiker is a great little SAK with an excellent wood saw. However, if you like the back Phillips and want a wood saw, you may want to also consider the Fieldmaster.



DAY 11 – EXPLORER

Vic's current 91mm range runs from 2 layers all the way to 15 layers, but the most popular are those that fall into the 4-layer category...all 8 of them.

With 3-layers, we had choice of scissors, wood saw, inline Phillips, LED or bit driver. Moving to 4-layers introduces the option to combine some of these tools, while introducing some new tools that you can't get in the 2- and 3-layer SAKs.

So over the next week or so we'll cover SAKs with tools we have not touched on before, such as the file/metal saw, ruler/fish scalers, pliers and magnifier.

And it's the magnifier that gets our attention today, as this is a tool found on the 4-layer Explorer.

The Explorer is often touted as the best SAK for urban EDC, and for good reason. It packs the essential Spartan toolset (openers, blades, corkscrew), and then adds 2 further layers that include Vic's excellent scissors and inline Phillips, paired with the magnifier.

We first came across the inline Phillips with the Spartan Lite, where it's paired with the LED. Unfortunately, the good people at Victorinox seem to like the LED, as it is the preferred pairing for the inline Phillips. If you want a non-electronics SAK with the inline Phillips other than the bigger Swiss Champ, you have exactly one choice...the Explorer.

Thankfully, the Explorer is a great SAK choice to do away with the LED, but if you have a fondness for batteries and electronic circuits, the 4-layer Traveller Lite gives you the LED/inline Phillips combination with scissors, plus you get the same digital scale we covered in the Traveller review a few days ago.

So back to the Explorer, and specifically the magnifier. Not to go into a deep history lesson on this little tool, but there are essentially 3 versions; the original with a smaller, grey surround for the glass lens, a later, larger version with clear surround and a...er...plastic lens, and the current version that returns to a glass lens within the clear plastic

surround.

To be clear 🙄 there's nothing wrong with the plastic lens. Its optics are just fine, and it won't pop out like some of the latest glass version have a tendency to do. But it will scratch more easily over years of service, and customer feedback may have seen Victorinox switch back to glass.

There are whole discussion threads on the magnifier, so I best stop with just a final couple of points. The first is that while the original grey version has a higher magnification, the longer depth of field and wider viewing angle of the newer design is easier to use. However...the newer, bigger design necessitates a slightly shorter inline Phillips. Does this detract from the overall improvements? I don't think so, but the old design sure has a strong following!

As the first 4-layer SAK up for review, it's worth touching on the reason many feel 4 layers is the maximum for pocket EDC. The reason is quite simple; a 4-layer SAK typically has close to a 1:1 width to depth ratio, so there's no orientation issues when dropping it into a pocket. With 5 or more layers, the width of the SAK becomes more noticeable in the pocket, as does the weight. In fact, some people feel that 4 layers is already too much. I guess it all depends how tight your jeans are!

So the Explorer sets a tough benchmark for the rest of its 4-layer brethren. It may also explain why the discontinued Yeoman (Explorer with opener layer replaced by combo tool), remains so popular.

Pros:

- Excellent scissors and inline Phillips
- Still considered pocketable for EDC
- Magnifier not as pointless as it may seem

Cons:

- Glass lens in clear frame can pop out

Bottom line:

The Explorer is a good EDC choice for the urban environment, and the inline Phillips will be the differentiator for many people. For a bit of fun, look for the older one with the longer Phillips and grey magnifier.



DAY 12 – MOUNTAINEER

The 4-layer Mountaineer has a bit of a confusing name, as it's not much related to mountains, hiking or camping. Maybe adding a file/metal saw to the 3-layer Climber was the inspiration?

Of course, the Climber is an excellent base to build on, and indeed, most of the 4-layered SAKs have scissors plus another tool to make up their tool set.

In the case of the Mountaineer, the metal saw is not immediately obvious. The design of the tool lends itself more to that of a nail file, complete with nail cleaning tip and an overall shape that closely matches the common nail file you'll find in most manicure sets.

But a close inspection of the bottom edge reveals a finely pitched, single row of teeth, raked forwards to give an aggressive cut on metal or other hard materials.

The file is a very old tool for Victorinox, and there have been many versions over the years. The current stainless steel version has a cross-cut design that is only visible from certain angles. It normally looks like

just one direction of filing, but there's a light second angled cut that overlays the first, deeper ones.

There's no back tool paired with the file on the Mountaineer, but you get the corkscrew, awl and hook.

If you like the file/metal saw, the Mountaineer is the only SAK in the 4-layer lineup (and none lower) that has it. But it does become a regular tool from 5 layers and up. Certainly a good option if you want this tool in a SAK that's still considered pocket-friendly.

Pros:

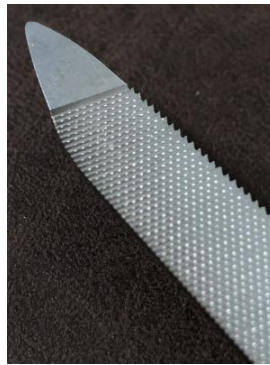
- Smallest (current) 91mm with file/metal saw tool
- Still has the excellent scissors
- One of the thinnest 4-layers SAKs

Cons:

- Only good for occasional metal cutting

Bottom line:

The file/metal saw is one of the least appreciated SAK tools, but is more multi-functional than the wood saw. The Mountaineer is the only 4-layer to house this tool, and should get more recognition because of it.



DAY 13 - HUNTSMAN

Today we cover one of my favourite SAKs; the ever-popular Huntsman. In many respects, the Huntsman is the ambassador for the entire 91mm range, proudly demonstrating the key attributes that make this range so successful.

While considered chunky at 4-layers, the Huntsman is still pocketable, packing the scissors/hook and wood saw together with the Spartan base configuration of an opener layer, large and small blade, corkscrew and awl. This toolset makes the Huntsman an excellent all-rounder, driving its popularity.

Not much more needs saying about the scissors and wood saw. Both are good tools I've reviewed with earlier SAKs.

The Huntsman's popularity is also reflected in the available scale variations beyond the standard red, including no less than three different camouflage schemes, Silvertech and Walnut wood. The Huntsman is also a popular choice for limited edition releases from Victorinox.

Pros:

- excellent all-rounder SAK
- Still pocketable
- Great range of scale options

Cons:

- Wood saw has limited applications (had to list something!)

Bottom line:

The star of the 4-layered range, the Huntsman could be the one SAK that best represents all that is great about the 91mm range.



DAY 14 – ANGLER

Fishing is a very specific activity, and Victorinox has a very specific tool to support users that catch fish. Well, that's the intention...however the tool Victorinox assigns to this task is probably rarely used as intended.

That's because we're discussing the fish scaler tool found on the Angler, the next 4-layer SAK up for review.

The Angler also features another tool we have not come across before in this challenge; the pliers. But first, let's get back to that fish scaler.

The fish scaler tool has a curved edge of scalloped teeth that are polished smooth. The idea is to drag this edge across a (dead) fish to remove the scales without tearing or cutting the skin.

I have caught and cleaned a few fish in my time, and can only imagine the slime and scale mess that would accumulate on (and in) my SAK if I used it to remove scales, but as I have never tried it, I really cannot talk with any authority on this matter. All I can say is that I prefer to use a single-purpose fish scaler, or the filleting knife, to scrape the scales off a fish before gutting.

As the infomercials say, "...but wait, there's more!..." the SAK fish scaler is equipped with a disgorging tip that can help reverse out the hook that's securely embedded inside the mouth of a fish. Again, I cannot attest to this use in the real world, as I prefer needle nose pliers for this specific task. But I guess if I'm on a deserted island with just my scaler-equipped SAK and the fishing kit from my SOS Kit, I'd be happily to have this tool?

Fortunately, for users less concerned with shipwreck survival, the fish scaler tool has other uses. The tip makes a good improvised cocktail-fork for retrieving pickles from a jar or picking cheese off a platter. Also as a 'prodger' for investigating questionable or unidentifiable objects (maybe at the bottom of that pickle jar).

The scaler also has a straight-edged ruler on the top edge, marked in inches and cm on opposite sides. Unfortunately, the geometry of the SAK does not let you use it flat on a surface to draw lines, but having

a short measuring tool could sometimes be useful...except maybe on a deserted island.

Oh, and another use is as a rangefinder. But I'm still to check the distance of a person against their relative height, measured at arms-length on the ruler. Something for a later post.

The second new tool found on the Angler are the pliers. It's important not to expect too much from this tool, especially if you're used to other brands' multitools that are built around pliers. The 91mm Victorinox pliers are understandably small to still fold into the SAK, taking up a space only a little wider than any other tool layer.

You're not going to bend plate steel or pull six-inch nails with this tool, but it's ideal for delicate work that requires a small gripping or squeezing tool. I used it to help open and close a link in a suspension chain for my SAK, working together with the needle nose pliers of my Leatherman. It was a good example of using two multitools together and where full-sized pliers would have offered no advantage.

I've heard the pliers referred to as 'super-tweezers', and I like this description. The tips close perfectly and are effective at grabbing small items like the exposed tip of a splinter. It's just a case of accepting that you will still need another multitool if you expect to need anything closer to real pliers.

Beyond the fish scaler and pliers, the Angler still has the core toolset of blades and openers, with an awl and corkscrew on the back.

Pros:

- Unique fish scaler tool
- The smallest current 91mm SAKs to have pliers

Cons:

- Unique fish scaler tool
- Pliers more like super-tweezers

Bottom line:

With the neat fish logo on the top scale (scale?) there's no doubt regarding the intended user for this SAK, even if the scaler tool is questionable. However, its 4-layered cousin, the Fisherman, with its Phillips back tool and scissors instead of pliers, may well be the better choice...if you like the fishy tool.



DAY 15 – TRAVELLER LITE

We covered the LED 'tool' in the 3-layered Spartan Lite (day 7) and it makes another appearance in today's reviewed SAK; the Traveller Lite.

We reviewed the Traveller back on day 8, but for a quick recap, the Traveller is basically a Climber with a digital scale that displays environmental info such as altitude and temperature, together with digital watch functionality.

The Traveller Lite adds a fourth layer incorporating an LED flashlight and inline Phillips, the latter probably the more useful of these additional tools.

This extra layer and the thicker digital scale make the Traveller Lite the widest of all the current 4-layer 91mm SAKs, even wider than some 5-layer models.

But there's no doubt that the LED and inline Phillips adds some real value to an already capable product.

Pros:

- The most feature-rich 4-layer SAK
- LED brighter than earlier generations
- Plus scales and nail file on the hook

Cons:

- A fat 4-layer SAK, not so pocket-friendly
- Does not like water
- Expensive

Bottom line:

A wide range of tools makes the Traveller Lite the dark horse of the 91mm range. If you enjoy digital functionality on a SAK, you should consider the Traveller Lite. But you may want to pass if you're looking for something that needs a little less maintenance.



DAY 16 - DELUXE TINKER

Scissors are very popular across the 91mm range, and the Climber (corkscrew) and Super Tinker (back Phillips) are both excellent 3-layered SAKs with this tool.

But if you want pliers with scissors, you only have one choice in 4-layers; the Deluxe Tinker.

And while the Victorinox scissors are good at general-purpose cutting (within the size limitations), the pliers are very much a compromise based on size and strength, and should not be considered an alternative for full size pliers.

As mentioned in the Angler review, where we first came across the pliers, it's best to consider the pliers

more as 'super tweezers'. Still useful, but you may want to pair with another multitool that has folding pliers if you expect to need this tool.

Pros:

- Good combination of scissors, pliers and back Phillips driver
- Pliers good for detailed, delicate work
- Still small enough for EDC

Cons:

- Pliers limited in strength and size

Bottom line:

The Deluxe Tinker is a great SAK if you can accept the compromise of the dinky pliers. But you may be better off with the Super Tinker and a Leatherman if you use pliers regularly.



DAY 17 – FISHERMAN

Choice is generally good, and Victorinox certainly give us lots of choice across the 91mm range.

And today, as an alternative to the Angler, we cover the Fisherman. Featuring the same fish scaler tool as the Angler, the Fisherman swaps the corkscrew for a Phillips back tool, and the pliers for scissors.

Now I'm a little of a traditionalist, so while I recognize the value of the back Phillips, my preference is the corkscrew.

But the scissors are certainly the more usable tool when compared to the pliers, so you have to wonder whether it would be better for Victorinox to rather put the scissors on the Angler, and set the Fisherman

off on a retirement cruise...

Sometimes choices are not necessarily better.

Pros:

- Scissors more useful than pliers
- fish scaler can be used as an improvised cocktail fork

Cons:

- fish scaler tool not particularly practical

Bottom line:

The fish scaler is not exactly a high-demand tool, otherwise we'd see more of it paired with scissors. The next time we come across it is with the Swiss Champ, and there you get it with scissors, pliers and the corkscrew. But for something with less layers, the Fisherman is the best alternative.



DAY 18 – FIELDMASTER

There are only six 91mm SAKs in the current range that have a Phillips back tool. We've covered five of them so far (Tinker, Super Tinker, Deluxe Tinker, Hiker and Fisherman), so today's mini-review is on the last one, the Fieldmaster.

The Fieldmaster can be considered the near-identical twin of the Huntsman, as it has the same tool load (scissors and wood saw), just with the Phillips on the back instead of the corkscrew.

However, the Huntsman gets the lion's share of attention as it's by far the more popular of the two. The Fieldmaster getting largely ignored.

Like the Huntsman, the Fieldmaster is quite a compact 4-layer SAK, and while you'll feel it in your pocket, it is usable for EDC on your person.

As a cross-over between urban and outdoor use, the Fieldmaster is certainly worth considering. Especially if you like using the wood saw and see value in having the Phillips over the corkscrew.

Pros:

- Both the scissors and wood saw are good at what they're designed for.
- Just about pocketable for EDC

Cons:

- Lacks the character of the Huntsman

Bottom line:

A little lost without a strong identity, the Fieldmaster is still a capable SAK with a good set of tools. It's just questionable whether it gives any real-world advantage over the Huntsman, considering that you get the corkscrew and can still use the can-opener's driver for cross-head screws.



DAY 19 – CYBERTOOL M

Stepping up from four to five layers today was quite a shock. While yesterday's 99g Fieldmaster could be pocket-carried, the 150g 5-layered CyberTool M (or CT-34) is a real pants-puller.

This is getting into the 4" Leatherman weight category, and it's really noticeable at the bottom of your pocket. I had to switch to a belt suspension pocket carry to lift it halfway up the pocket, placing the weight on my belt. This is a common carry for me (even with smaller SAKs), as I find it comfortable and also a good way of not losing your SAK.

So back to the CT-34. This is a really chunky SAK with two layers that are wider than normal; the bit adapter and the pliers. Added to these are scissors and the standard set of blades and openers. Tucked away on the back are the corkscrew, hook and awl tools.

In fact, the CT-34 is just like a Deluxe Tinker, but with a corkscrew replacing the Phillips, and the added bit driver layer. Certainly a very capable tool load.

We covered the 3-layer CyberTool S (CT-29) about two weeks ago, but just as a recap, the bit driver

accepts double-ended 4mm bits, 3 of these stored in a clever fold-out carrier that stows under the driver, and the 4th kept in the driver itself, giving a total of 8 combinations. The bit driver is also a decent length, giving good reach and usability of this versatile tool.

While the bit driver is strangely not the central layer, the overall SAK is not too wide to prevent easy turning of the driver when needed.

Pros:

- Very capable bit driver tool
- Includes scissors and pliers for a good tool load
- Plus scales with pen are standard

Cons:

- Large and quite heavy, not really pocketable
- One of the more expensive 91mm models

Bottom line:

Considered the base CyberTool model, the CT-34 is probably the most popular of the bit-driver SAKs. It really is a hefty piece of gear, and you may need to reevaluate your carry options. But I still wonder how necessary it is to carry a bit driver when there are already good fixed driver tools available on many other SAKs.



DAY 20 – RANGER

We now move to the second 5-layer SAK; the Ranger. And here we find, for the first time, the combination of scissors, wood saw and metal saw/file.

You can think of the Ranger as the combined DNA of the Mountaineer (scissors and file) and the Huntsman (scissors and wood saw).

And the file and wood saw are two of the slimmest layers, so the Ranger is no wider than some 4-layered SAKs, and pocket EDC was OK. Although I was using a suspension clip.

But what really makes the Ranger special is that every single layer has a back tool, and it's the only 91mm SAK to have this density of tools. So in addition to the hook, corkscrew and awl that's standard fare on many SAKs, you get the fine flat screwdriver paired with the wood saw, and the chisel paired with the file.

It's no wonder that the Ranger is so popular. And it

gets the really smart 'camping' logo on the top scale, the same design as the one used on the Camper, but a higher quality application that's printed and then clear gloss top coated, as is the Victorinox logo.

I really enjoyed carrying the Ranger. It's almost a Swiss Champ on diet, losing the pliers, inline Phillips/magnifier and scaler, but a lot more compact.

Pros:

- Great tool combination
- Full compliment of back tools
- Surprisingly compact for 5-layers
- Well-priced for what it offers

Cons:

- Difficult to fault. Plus scales would have been nice, but can always be added.

Bottom line:

This is the SAK to have if you're looking for an all-rounder that won't break the bank. Anything less and it's a case of a specific tool requirement or lightweight EDC. Anything more and you're looking at the much more expensive Swiss Champ.



DAY 21 - HUNTSMAN LITE

Victorinox has six 91mm models in their current range with the LED feature, typically paired with the inline Phillips screwdriver.

We've covered two so far, the 3-layer Spartan Lite and the 4-layer Traveler Lite. Today it's the turn of the 5-layer Huntsman Lite.

As the name implies, this model has the same basic toolset as the Huntsman (scissors and wood saw) with one extra layer between the scissors and the openers to house the LED module and inline Phillips.

Victorinox also saw fit to include Plus scales with the mini-screwdriver/pin accessories as standard, and also the fine screwdriver back tool paired to the wood saw layer.

I've been a little critical of the LED in the past, and it is true that later models are a little brighter. But you'll never use this LED for anything other than close proximity use around your person. Probably OK for most tasks.

I still wish they had designed the LED so that it could clip off and be used independently. I can imagine being in the dark, needing to use the SAK to work on something that needs illumination at the same time.

I can see myself disassembling one to cut a 2.5mm notch in the plastic pivot area below the LED diode, so that I can rotate the module upright and then lift it off the pivot. Would lose some tension on the Phillips and there's always the risk of losing the LED module, but in an emergency, it would be great to be able to pop the module out. (Comments from

modders welcome...)

Anyway, enough ramblings about nice-to-haves. I mentioned in an earlier review on a Lite model that the LED button has an instantaneous feature. Well, the Huntsman Lite I have only has the slide function. You cannot press it briefly. Only slide it back where it locks on permanently. Now I don't know if this is a newer or older version, but I suspect older, as the LED is a little dimmer. I prefer the momentary feature, and there's really not much chance of accidentally pressing it as the button is recessed.

In some ways, the Huntsman Lite can be thought of as an Explorer with the wood saw added and the magnifier changed for the LED. Considering how popular the Explorer is, it's a little surprising that the Huntsman Lite doesn't get more interest. I suspect that many see it just as an expensive Huntsman with an LED, not realizing that it also includes the excellent inline Phillips.

Pros:

- Good tool set with inline Phillips screwdriver
- Plus scales and accessories standard

Cons:

- LED useful for very close proximity illumination only (maybe a benefit)
- Does not like water (electronics)

Bottom line:

Many of the Lite models suffer the same fate of being largely ignored, which is a shame because the inline Phillips paired with the LED is one of the better tools to be found on a Victorinox. This extra layer, Plus scales and accessories, make the Huntsman Lite an interesting alternative to the standard Huntsman.



DAY 22 - CYBERTOOL LITE

So we leave the five layered 91mm SAKs behind us today...they were only three...

And we step into six layers with the CyberTool Lite. Even though there are 91mm SAKs with more layers, the CyberTool Lite is wider than most. Even wider than the 7-layer CyberTool L (CT-41) and the 8-layer Swiss Champ. This is because of the tool load; scissors, pliers, LED and magnifier and of course, the bit driver.

The CyberTool Lite is effectively a CyberTool M with the LED and magnifier as an added layer. Spot something different? Yes...normally the LED is paired with the inline Phillips, but as the CyberTool already has a very capable bit driver, Victorinox were smart enough to rather pair it with the magnifier.

The CyberTool Lite tool configuration also means the LED shines in the same direction as the deployed bit

driver. So you can see what you are screwing (always helpful).

As the rest of the tool load is the same as the CyberTool M (CT-34), I'll refer you back to that mini-review I did a few days ago if you want more details.

Pros:

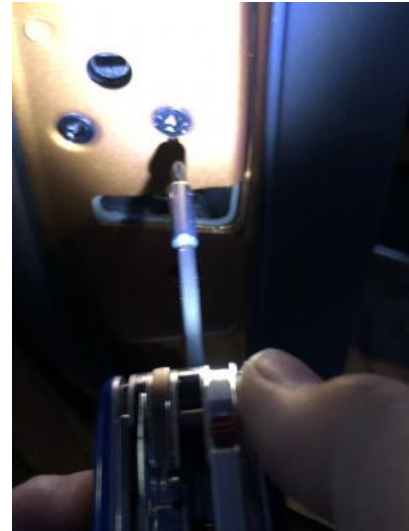
- Excellent bit driver
- LED points the right direction when using the bit driver

Cons:

- A very large SAK, bigger than a Swiss Champ
- Won't like water because of the electronics

Bottom line:

The CyberTool Lite is a big SAK, but ideal if you need some extra illumination when using the bit driver. There are reducing options once you get into six layers and above, so it becomes increasingly difficult to make a choice. And this model is one of the more specialized options.



DAY 23 - HANDYMAN

For some, the 5-layer Ranger is the ideal SAK. It combines the essential large and small blades, bottle and tin openers that double as screwdrivers, scissors, wood saw, file with metal saw, and five tools on the back including the corkscrew, awl, fine screwdriver, chisel and hook.

Victorinox had a few choices of what tool to add to the Ranger, and I'm pleased they chose the pliers. This 6-layer model, known as the Handyman, really does live up to its name.

Only a few tools short of the Swiss Champ (fish scaler and inline Phillips/magnifier), the Handyman is a little easier on the pocket, both in terms of Dollars and weight. Probably the smarter choice, if you can live without the inline Phillips.

Pros:

- Comprehensive tool set
- Quite compact for a 6 layer SAK

Cons:

- Just a little big for pocket EDC, without a suspension clip
- Pliers more like super-tweezers

Bottom line:

Living under the shadow of the iconic Swiss Champ can't be easy. But the Handyman is a real alternative if you're looking to save a little in size and cost. Unfortunately, I expect most people will just go straight for its bigger brother and never look back.

(NB: last pic compares width to another 6-layer SAK, the CyberTool Lite, reviewed yesterday).



DAY 24 – CYBERTOOL L

I am skipping the last 6-layered SAK; the Expedition Lite. Only because the one that should be the focus of today's attention had to go back to the factory, and hopefully its replacement arrives this week...so it will still get its chance to shine before the challenge is over.

So the next SAK up for consideration is the largest of the officially named CyberTools, the CyberTool L or CT-41.

And while the CyberTool Lite, M and S models are all directly related to one other, the CT-41 is closer to the Handyman than to its CT siblings.

In fact, the CT-41 can be considered a Handyman with the bit driver tool layer added. So it keeps the Handyman's great tool load of blades, openers, file/metal saw, wood saw, scissors, pliers and five back tools.

It's because of this relationship to the Handyman, itself so close to the Swiss Champ, that many see the CT-41 as the modern alternative to the Swiss Champ. And it's identical in width to the Swiss Champ, so

while you lose the fish scaler and magnifier, the inline Phillips is replaced by the very capable bit driver.

It's easy to assume that the CT-41 is the biggest of the CyberTools, especially as it's called the CyberTool L, but as the pictures below show, the CyberTool Lite is wider than the CT-41 by quite a margin due to the LED module.

Pros:

- Very capable alternative to the Swiss Champ
- Good bit driver
- Plus scales and accessories

Cons:

- Bit driver offset from center so not as easy to use as those on other CyberTools
- Difficult for pocket carry due to size and weight

Bottom line:

The bit driver is one of the newer tools created by Victorinox, and it's a little at odds with the rest of the SAK tools that blend in more seamlessly. But putting this aside, the CT-41 is the only real alternative to the Swiss Champ, if you are looking for the most functionality in a body that's no wider.



DAY 25 – SWISS CHAMP

At some time, around 70 years ago, Victorinox realized that there was a market for a multi-layered Swiss Army Knife. Not just the garden-variety three or four layers like they did in the 1940's, but jumping to six layers. Something that included all the major tools available across the product line, in one medium-sized pocket knife.

This was the '52 Champion. And it was exactly that, for over 30 years (with a mid-life upgrade to 7 layers). The flagship of the 91mm range, evolving together with the tools as they were developed and improved over time.

Then in late '85, Victorinox launched the Swiss Champ (the name no doubt derived from its predecessor, which continued in production until recently). And today, almost 35 years later, the Swiss Champ is still considered the flagship, even though there are bigger 91mm models available, and even mainstream models, like the CyberTools, with more functions.

But there's a sense of completeness, like a well-written symphony, about the Swiss Champ. Holding one never fails to impress, to the point where we can excuse some of its shortcomings, like its sheer size and weight.

I carried my Swiss Champ today on a short suspension clip, and it rides quite comfortably in my pocket. It's probably true that I'll never use all tools in a week, or even several months, and I could

probably rotate a dozen smaller SAKs every day and get by. But there's something undeniably special about carrying a Swiss Champ.

Sure, the fish scaler won't get used to scale fish (by anyone), and I would probably not want to assemble IKEA furniture with the inline Phillips. But the point is; with the Swiss Champ, you can. And with 8 layers, 64 individual parts, 16 folding tools that I won't name here, 5 removable tools and 33 functions, there's a lot more possibilities with this, the champion of Victorinox.

Pros:

- All the tools you'll almost never need in one package
- You can pocket EDC if you're passionate about your SAK
- The reward of owning one

Cons:

- Overkill for most people
- Lives a little on its reputation
- Size makes some tools awkward to use

Bottom line:

It's really hard to be critical about a product that has been refined over several decades. Many of the tools are quite compromised due to space limitations, but each functions as well as can be expected...sometimes better, and the quality of the fit and finish is top-class. It's difficult to have an interest in Swiss Army Knives and not own a Swiss Champ, but it's just as difficult to justify whether you need 33 functions in your pocket.



DAY 26 - SWISS CHAMP SUPER TIMER

As we're approaching the end of this challenge, I have a few discontinued 91mm models to fill out the 30 days.

Seeing we reviewed the Swiss Champ yesterday, it's only fitting to cover the Swiss Champ Super Timer. This was the first time Victorinox added electronics to a Swiss Army Knife, and the last time they included an analogue timepiece in a pocket knife (together with the similar watch-equipped Compact, the Time Keeper).

Launched a few years after the Swiss Champ in the early 90's, the Super Timer uses a little quartz module designed to clip into a modified top scale. The watch was made for Victorinox by ETA, a Swiss manufacturer of movements that has a history even older than Victorinox. Today, ETA is part of the giant Swatch Group who also own famous brands such as Omega, Breguet and Glashütte.

The little embedded quartz watch is water resistant with a case that is reminiscent of a Swatch watch, and likely designed by the same team. The case and crystal are plastic and sealed as one unit, with a pop-off cover for the battery compartment. Also zero jewels like a Swatch, but this is not an issue as there's no tension on the gear-train in a quartz watch, and it has no second hand, keeping the height of the movement within the scale, almost.

The custom top scale is a little deeper than normal and swells slightly to accommodate the watch, strategically at the same point where the awl is stowed - cleverly providing some protection for the crown. Victorinox even cut out the liner to recess the

battery cover, as can be seen in the picture.

There's also a picture of one next to a Swiss Champ from the same era. If you have a newer Swiss Champ you might spot a few differences other than the obvious length of the Phillips and the grey magnifier.

Today, Victorinox uses a digital scale with an LCD to display the time, but ironically, like the analogue Super Timer, only hours and minutes are displayed. Some watch connoisseurs may turn their noses up at an analogue quartz movement, but for this application, it was the right choice.

And as nice as it is to have the additional functions that come with the new digital scale, there's something timeless about the elegant oval face of the Super Timer. It's one of my most special SAKs.

Pros:

- It tells the time
- It's still a Swiss Champ
- The watch module can be removed to deep clean the SAK

Cons:

- Won't be as robust as a standard SAK
- Discontinued and getting expensive

Bottom line:

The Swiss Champ Super Timer is one of the more unusual discontinued models that today is becoming quite collectible. It's not the most attractive industrial design, with the watch face a tad too big for the scale, reminding me a little of Salvador Dalí's Persistence of Memory painting. But there's no denying that Victorinox did a good job marrying these two very different technologies, and this quirkiness even adds to its appeal.



DAY 27 – SWISS CHAMP XLT

Victorinox products are generally designed for everyday use. But like many brands, they have realized there's good business to be made by targeting enthusiasts and collectors.

And while there's nothing stopping you carrying a limited edition Victorinox Damascus pocket knife for EDC (and people do), the size of the very large SAKs, with 10-15 layers, do tend to limit them to collectors (that, and the price).

But there appears to be one 91mm Victorinox that has a little bit of an identity crisis. Is it for general use, or for the collector? This is the 11-layer Swiss Champ XLT.

Victorinox realized, shortly after launching the CyberTool family in 2000, that they could add the newly-released bit driver to the Swiss Champ and create a super Swiss Champ. But in an unusual decision, Victorinox decided to add a further two layers, one for the Pharmaceutical Spatula and another for a pair of less common short blades, a Pruning and an Electrician's blade.

So Victorinox may have missed an opportunity to upgrade the Swiss Champ with just one extra layer, similar to what they did with the Champion, when they added the inline Phillips and magnifier as a mid-life upgrade from six to seven layers.

But there's a simple explanation. Victorinox had just released the Swiss Champ XL a year before the CyberTool, and I suspect that as sales were poor on this product, they decided to swap out the golf-specific divot repair tool for the more useful bit driver.

There's also the need to space products and prices to avoid unnecessary sales cannibalization. A Swiss Champ with a bit driver could put CyberTool L (CT-41) sales at risk and even threaten the Swiss Champ. But I still think they missed an opportunity.

As a side note, it's common for the XLT to be referred to unofficially as the CT-50, for its 50 functions and tool relationship with the CyberTool family. Maybe if they dropped a couple of questionable layers, they could market it as a 9-layer CyberTool XL?

Pros:

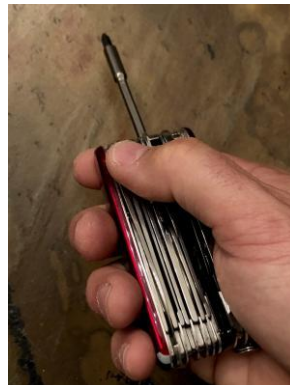
- A Swiss Champ with a bit driver

Cons:

- Unnecessarily extra layers come along for the ride

Bottom line:

The XLT should not be seen as a collector's SAK, but as a Swiss Champ with an added bit driver, ready to be carried in a bag or glove compartment to tackle any range of tasks...even to handle pharmaceutical products.



DAY 28 – ASTRONAUT MASTER CRAFTSMAN

Victorinox has over 50 discontinued 91mm models, in addition to all the limited edition and special releases.

In the current range, there are some with identical tool loads, with just the back Phillips or corkscrew differentiating the model. Like the 3-layer Camper/Hiker and 4-layer Huntsman/Fieldmaster pairs.

The popular 5-layer Ranger used to have a partner with a Phillips backtool. This was the Master Craftsman...now discontinued. There are sadly no 5-layer SAKs left in the current 91mm line up with a back Phillips.

With scissors, metal file and wood saw (and standard blades and openers), the Master Craftsman has a good tool load. It has a Phillips back tool, with early models missing the hook and chisel, but including the 2.5mm screwdriver and awl on the back.

What makes the Master Craftsman interesting is that it was (apparently) the model NASA bought in '78 for their space shuttle program. Victorinox picked up on this marketing opportunity, renaming it the Astronaut in '86. Some with the Space Shuttle logo on the top scale.

The Master Craftsman model I have dates from around 1989, making it an Astronaut. It had plain

scales that I swapped out as they were a little scratched up. It has no hook, but interestingly, it does have the chisel.

Beyond the great tool load on the Astronaut, I appreciate the clean lines it has with the Phillips back tool. And the lack of the hook I believe makes for a smoother, neater shape on the back. Furthermore, these earlier models have a full-height liner between the file and wood saw, filling the gap and looking a bit cleaner (although the saw's teeth can catch the liner).

Overall, I find this SAK one of the most attractive that I own. And while I'm a traditionalist at heart, in the case of the Astronaut, I like the Phillips back tool. I guess there were more screws in space.

Pros:

- High density tool load
- Historical significance
- Elegant, integrated design

Cons:

- Discontinued
- Missing the hook (but looks better)

Bottom line:

There really is no equivalent to the Master Craftsman in today's lineup, which makes it all the more disappointing that it's no longer available, as it has a good tool load and I am sure it was popular in its day. You don't need to be a rocket scientist to figure that out.



DAY 29 – SPARTAN PS

Before we wrap up the 30 day challenge, we're rewinding almost to the beginning, back to the Spartan we covered on Day 2. Not just any Spartan, but the Spartan PS.

Unlike a black oxide finish, the Spartan PS has a shimmering black Polispectral finish created by immersing the stainless steel parts in a hot chromic-sulphuric acid solution and following this with a cathodic hardening treatment in another acid solution.

The colouring process chemically thickens the passive chromium-oxide layer that gives stainless steel its corrosion resistance. And the colours are produced by the interference that occurs as light waves pass through the transparent passive layer.

Being colourless, the chromium oxide layer is not susceptible to fading by ultraviolet light and, as the colouring process does not involve pigments or colouring agents that might bleach or fade over time, Polispectral stainless steel has a long life. Plus it does not rub off on your hands like black oxide.

A particular attraction of the Polispectral finish is that it appears to change colour under different lighting conditions and angles. It's not particularly noticeable on the Spartan PS, but it does change though light grey, charcoal and to a deep black at

different angles.

A downside is that the finish cannot be repaired if scratched, so while it is attractive on a Swiss Army Knife, it will get worn with use and these wear marks cannot be removed by polishing or refinishing. Victorinox even warn about this characteristic.

Victorinox charge a hefty premium for their Polispectral SAKs. Currently they offer it only on the Spartan, with white, black and camo scales. (And Man on the Moon LE).

I covered a more in-depth review of the Polispectral technology back in April in this rather long post:

<https://forum.multitool.org/index.php?topic=81313.0>

Pros:

- Unique black tools very attractive
- It's still a Spartan

Cons:

- Polispectral coating cannot be repaired
- 3 x the cost of a standard Spartan

Bottom line:

There's no denying the attraction the Polispectral finish creates on the Spartan PS, but it's a serious premium that is difficult to justify. Still a very nice shelf queen...



DAY 30 – SWISS CHAMP XAVT

What has 15 layers, weighs 12.6oz (356g) and is 2.5in (65mm) wide? As it's Day 30, you've probably guessed...the Swiss Champ XAVT.

This is the largest 91mm SAK in the current range, adding 4 layers to the already large XLT, and comfortably doubling the width of the Swiss Champ. It's like you glued two Swiss Champs together!

Surely this is too large to use and carry? But people do. It has an oversized leather case for belt carry, and while you need to stretch to get your hand around it, the tools are usable. It's just a little cumbersome and heavy in the hand. Victorinox market the XAVT as geared for collectors, and I guess they're right.

So what's added to make up the extra layers? As most people are familiar with the Swiss Champ, I'll discuss what's extra compared to this model.

First there's the digital scale with LCD display. Then paired to the inline Phillips is a universal wrench, the design borrowed from Wenger. It has two bit drivers, with an extra 4 bits not found on the CyberTools. The LED is the new transparent housing version with a much brighter and usable LED. Then there's the very nice large serrated blade. This is from 'new old stock' as it has the older crossbow logo on the tang. Paired to this blade is an inline awl, like those found on the Alox Pioneers. (This is my favourite layer on the XAVT).

There's the short pruner, electrician's blade and pharmaceutical spatula as found on the XLT. And just for good measure, there's a combo tool and a watch case opener.

The back has two hooks, one with the nail file, and two 2.5mm drivers. Along with what you'd expect, such as corkscrew (plus mini screwdriver), awl and chisel. The bottom scale houses the tweezers, toothpick, pen and pin...the same scales as found on the Traveler and other digital SAKs.

The total count of functions varies depending on where you look, between 80 and 83. Compare this to 33 for the Swiss Champ and 50 for the CyberTool L and you get an idea of just how impressive this monster really is.

But there's some tool duplication, so a re-count of actual functions, with less creative license, tops out at 70. Still very impressive!

1. Toothpick
2. Tweezers
3. Pressurized Ballpoint Pen
4. Stainless Steel Pin
5. Thermometer (C/F)
6. Digital Watch (12h/24h)
7. Alarm
8. Countdown Timer
9. Stopwatch
10. Altimeter (m/ft)
11. Barometric trend graph
12. Reamer/Punch/Sewing Awl
13. Can Opener (standard & combo tool)
14. Screwdriver 3mm (on Can Opener)
15. Bottle Opener (standard & combo tool)
16. Wire Stripper (x2)
17. Screwdriver 6mm (on Bottle Opener)
18. Key Ring
19. Universal Wrench M3/M4/M5*
20. Inline Phillips Screwdriver 1/2
21. Magnifying Glass
22. Pliers
23. Wire Cutter
24. Wire Crimper
25. Fish Scaler
26. Hook Disgorger
27. Ruler (cm/inches)
28. Multipurpose Hook (x2)
29. Small Nail file (on one Multipurpose Hook)
30. Large Blade w/Serrated Edge
31. Inline Reamer/Punch*
32. Wood Saw
33. Scissors
34. Screwdriver 2.5mm (x2)
35. Pruning Blade
36. Electrician's Blade
37. Wire Scraper
38. Pharmaceutical Spatula
39. Watch Opener*
40. Screwdriver 5mm (on Combo Tool)
41. Nail File
42. Nail Cleaner
43. Metal Saw
44. Metal File
45. Chisel 4mm
46. Large Blade
47. Small Blade
48. Bit Slotted 3mm*

- 49. Bit Slotted 4mm*
- 50. Bit Torx 6*
- 51. Bit Torx 8*
- 52. Bit Hex 1,2*
- 53. Bit Hex 1,5*
- 54. Bit Hex 2*
- 55. Bit Hex 2,5*
- 56. Bit Slotted 4mm
- 57. Phillips Bit 2
- 58. Phillips Bit 0 (Pozidrive)
- 59. Phillips Bit 1 (Pozidrive)
- 60. Torx Bit 10
- 61. Torx Bit 15
- 62. Hex Bit 4
- 63. Torx Bit 8
- 64. Bit Case (x2)
- 65. 4mm Bitwrench (x2)
- 66. Female Hex drive 5mm for D-SUB Connectors (x2)
- 67. Female Hex Drive 4mm for Bits (x2)
- 68. LED
- 69. Mini Screwdriver
- 70. Corkscrew

Pros:

- The ultimate expression of a Victorinox Swiss Army Knife
- Several tools that are unique to the XAVT in the 91mm range (*)
- A fantastic reference to all the 91mm tools that are available

Cons:

- Not really intended for EDC
- Super-wide width and extra weight make some tools difficult to use
- Very expensive

Bottom line:

The XAVT is an incredible SAK. Victorinox went out of their way to include not only every current tool in the 91mm range, but to even include tools borrowed from different ranges. Some may see it as a monstrosity, but it's really a superb technical demonstration of what's possible from Victorinox. I love it.



BONS DAY - EXPEDITION LITE

Sometimes a manufacturer's product positioning is difficult to understand. Here's a case in point...

For many, the ideal SAK is a Swiss Champ without the Fish Scaler and Pliers. With 6 layers, this would be a little more easy to carry, yet still address 95% of what a typical Swiss Champ user needs.

The Handyman is almost there, but the excellent inline Phillips is missing, and it still has the Pliers that are not a particularly popular tool.

So how about the Expedition Lite? "...the what?" I'm sure many of you will ask?

The Expedition Lite is probably the least-known SAK in Vic's current 91mm lineup. To the point where I had to get one ordered from the factory to finish off this challenge as a Bonus Day.

So imaging a 6-layer Swiss Champ without the Fish Scaler and Pliers, and you (almost) have the Expedition Lite...rejoice! (cue choir...)

I said almost, because the magnifier is replaced with the excellent new clear LED (that is now bright enough to be usable). I could live with this change, but Victorinox decided to pull out all the stops on this model, as they added the digital scale (LCD with time, altitude, barometric trend, temperature, alarm, countdown timer and stopwatch), and bundled the SAK in a leather pouch together with a compass and sharpening stone.

Now you know why it's called the Expedition Lite.

Of course, what could have sold at a price around that of a Handyman, moved to a collector's level of an XLT.

So was this a missed opportunity for Victorinox, is there method in their madness? I'm really not sure. The Expedition Lite is basically a Ranger with inline Phillips and an LED, so it would have the potential to be very popular.

However, it does seem that they wanted to create a unique package with this offering, and there's no denying it would be an excellent companion for an expedition into the great unknown. I just wonder if Victorinox missed a trick by not releasing it as a stand-alone SAK without the digital scale?

Pros:

- Very good tool load in 6 layers
- Much brighter LED (new clear housing)
- Bundled with nice accessories

Cons:

- Only available as a bundled offering
- Electronic, so does not like swimming
- Pricing in collector's territory

Bottom Line:

I can't help think that Victorinox made a mistake with this product. The more I look at this SAK, the more I love this tool load. If it wasn't \$200 I'd probably whip off the digital scales and use it for EDC. I may just carry it as is and enjoy it. I guess this is the 'sleeper' of the range...a great SAK to finish the range as a bonus day!

(Last pic compared to a Swiss Champ for size).



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