Fabric Effect Masks

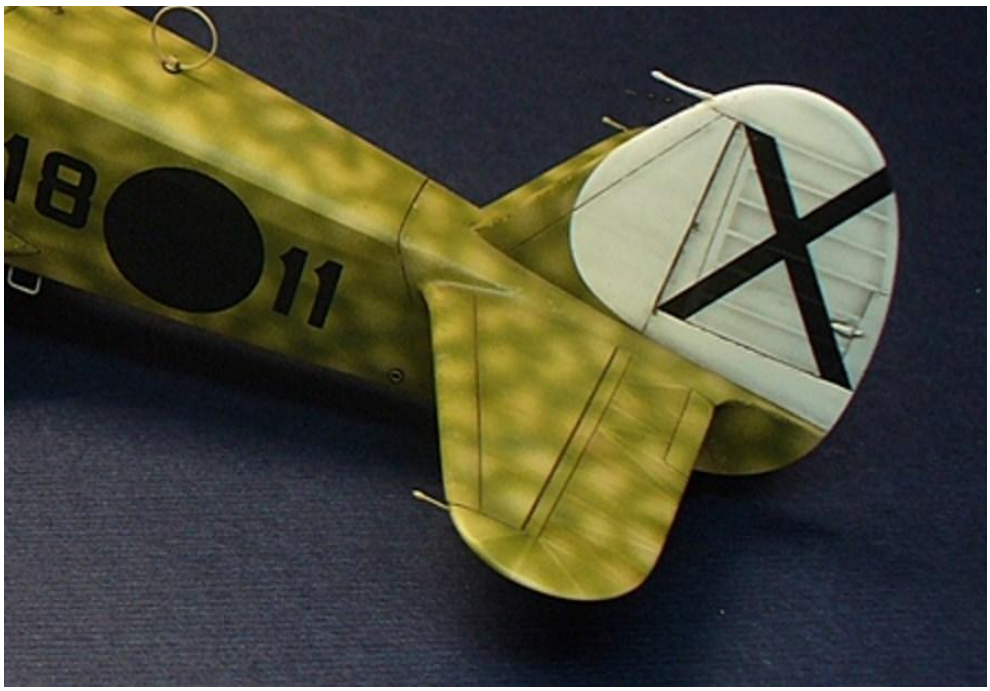
by Vladimir Kafka

Introduction

I would like to introduce a new product: airbrush masks for fabric effect shading on control surfaces of model aircraft.

First, what is this thing good for, and how did I come up with such an idea?

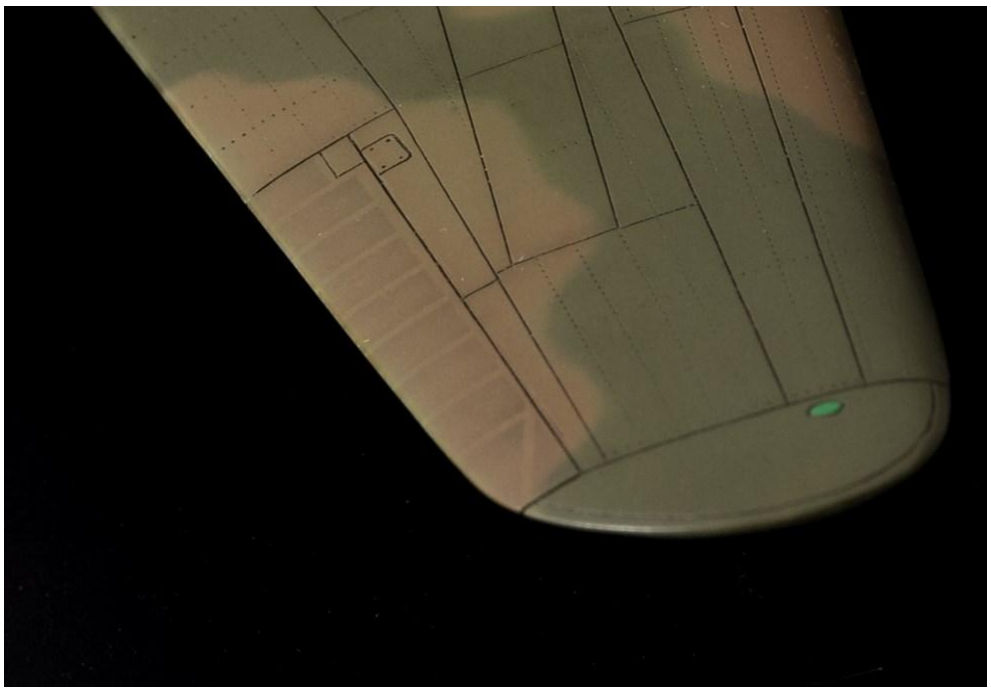
Initial inspiration came from a fellow modeller and a good friend of mine, David Hényk, who has been succesfully using this method of, as he says, “accentuating a nonexistent detail” for a long time already. See below his Caproni Ca.310, a several award winning model, as an example.



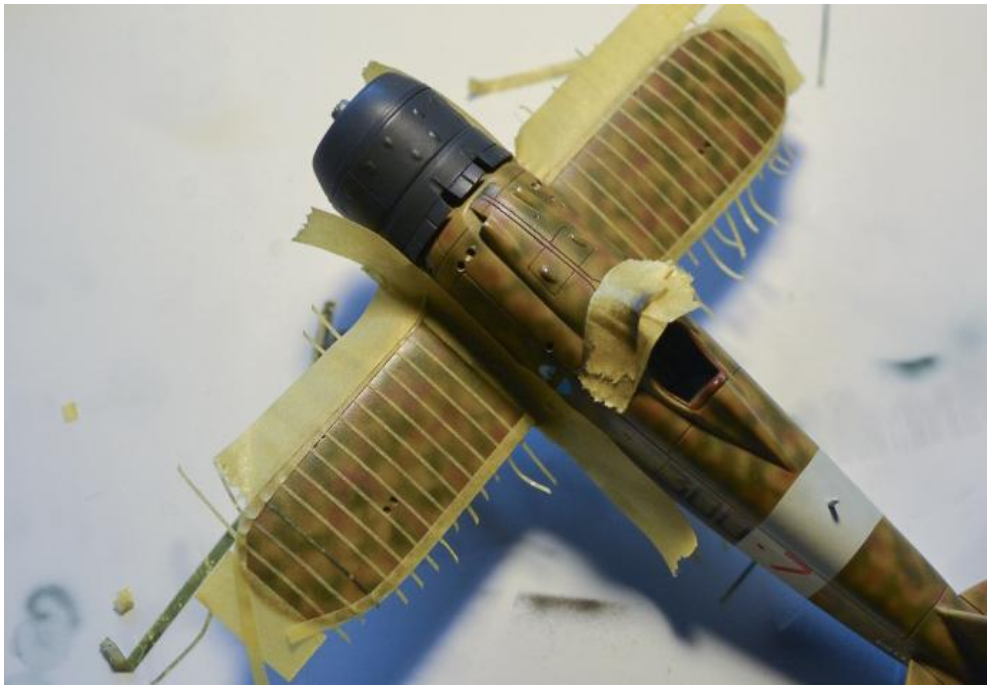
Such shading, done properly, should not catch the eye instantly - same as riveting or panel lines.
Only on second glance one realizes what makes the model look so alive and it's all like "wait wait wait...how did you did THAT?"
Let's face it, it might look a bit hyper realistic (again, same as riveting and panel lines), but it also looks so damn good.

When I first tried to mimic this method, I quickly discovered the other side of the coin. It's incredibly tedious. To put about a hundred of tiny strips of Aizu tape on an almost finished model (risking various scuffs and grease marks etc.) and make them all parallel is the easy part. The real chore comes when you have to cover all the trailing edges, various hinges, hatches and actuators... Then you have one attempt and after unmasking, moment of truth comes. And I always knew, no matter how undone or overdone the shading would be, I will leave it as it is. Someone would have to point a gun at me to force me to mask it again!

In the end I only applied it on two models ever. Once, recently on my P-40K (see October 2018 issue of Finescale Modeler for more photos):



Once, a couple of years ago on an Italeri Fiat CR.42:



This case counts as at least three models, though, as I applied the shading on a whole model - my personal record in modelling masochism to this day.

I always thought using pre-cut masks would be much easier. But I had doubts about ease of placement, maybe some transfer tape would be needed etc. Simply said - I thought, there must by some catch, otherwise someone would be producing it already.
And then I tried it (best way how to prove a theory, really) and soon realized, the only problem was in my head. The chosen material (well known Oramask 810) works like a dream without any problems. What took several modelling sessions, now takes just minutes. Result is better looking as well. Overlapping intersections of masking tape created sharp corners, while on the masks I made them rounded, which gives the shading a much more natural look.

On a side note, I don't claim any originality (and neither does David), as this kind of shading is

basically a method used for a long time mainly by WW1 modellers. Also, recently I found out there is a remotely similar product on the market already - HGW makes fabric effect products for some 1/48 models, although these are not aibrush masks - you stick them on a model and they stay there.

After I made masks for all the relevant kits in my stash (mostly a bit offbeat types) I realized, if I put some elbow grease (or rather wrist grease) into it, I might as well make some masks for sale. So, here I am, three months later, with a slight carpal tunnel syndrome, but also with a reasonable portfolio of masks covering all major air forces.

Interlude

I can imagine some readers are now thinking, this is for advanced modellers only, my airbrush and/or paints are not good enough, my skills are not advanced enough, or, I am too old to learn this fancy modern Spanish School nonsense anyway- Fear not and read this through, there is a special chapter further below to dispel these fears. :)

How To

For demonstration, I used an old model of Macchi C.202 Folgore by Italeri.

Ideally, the surface on which you apply the masks should be matt or semi-matt.

- Such surface absorbs the highly diluted paint better and it's less likely to become runny,
- masks adhere less, which makes their correct placement easier,
- you can better aim your airbrush and better guess the right intensity as there is no glare,
- there is a lesser risk of damaging the surface.

I mention the last reason for sake of completeness, as the risk is rather non-existent anyway. Oramask 810 is even finer than yellow masking tape. I tested application on lightly dried paint sprayed 15 minutes before without any issues. But extra caution is never a bad thing especially when masking over decals.
In this case, I **sanded down the existing fabric effect** earlier.
Almost all masks are **measured and cut to fit on existing fabric effect without trouble**.
However, during testing I found out that the shading almost always looks better when you sand the

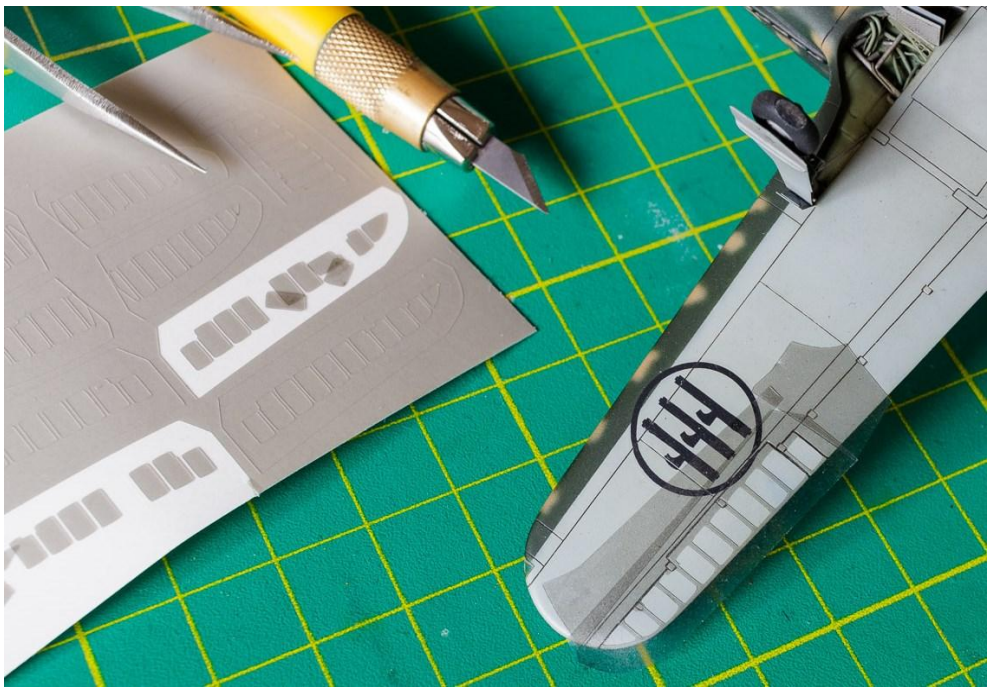
surface down first. Placement is also much easier, as you don't need to precisely align the masks with existing ribs, especially if they are very well defined and "machine-like" (new P-40 by Special Hobby, for example). Then there are a few models (at the moment, Bf 109G, Bf 108 and P-36, all by AZ/Kovozávody) where I definitely reccomend sanding as I can't guarantee proper fit otherwise. Make your own decision case by case depending on your taste.
As for me, I am often surprised how strange or overdone fabric looks, even on otherwise almost perfect kits (for example the plank-like ribs on elevators of Eduard's Spitfire IX).

By the way, sanding down the surface has one positive side effect, too. You can sand down trailing edges nicely from above without worrying about the fabric effect - exactly what I did on this Folgore. You still have to rescribe some panel lines, but there are usually not that many near the edges.
You will appreciate this if you are like me, I mean, when using the more traditional method of sanding the edges from inside, no matter how well you know the theory, you always end up with wide gaps :)

Mask application. Removal from backing sheet is easy, only occasionally you need to pop out a window with tweezers. **You don't need any transfer tape to manipulate the mask**, it slides on the surface almost like a decal. If it sticks to a wrong place, just lift it and try again, on second on third attempt it will be right on the spot. It's elastic enough, does not rip or deform permanently. If you end up with slightly bent ports, just straighten them up with a cocktail stick. I'd say even without any practice it takes about half a minute to place a mask.

Intentionally, I leave quite wide rim around the masks to make them holt their shape much better - they don't limp and stick to itself when you lift them with tweezers.

If the rim is not wide enough to protect the surface against overspray, I cut leftover pieces from the sheet and stick them around. As you can see, I mask over decals without fear:



Five minutes later:

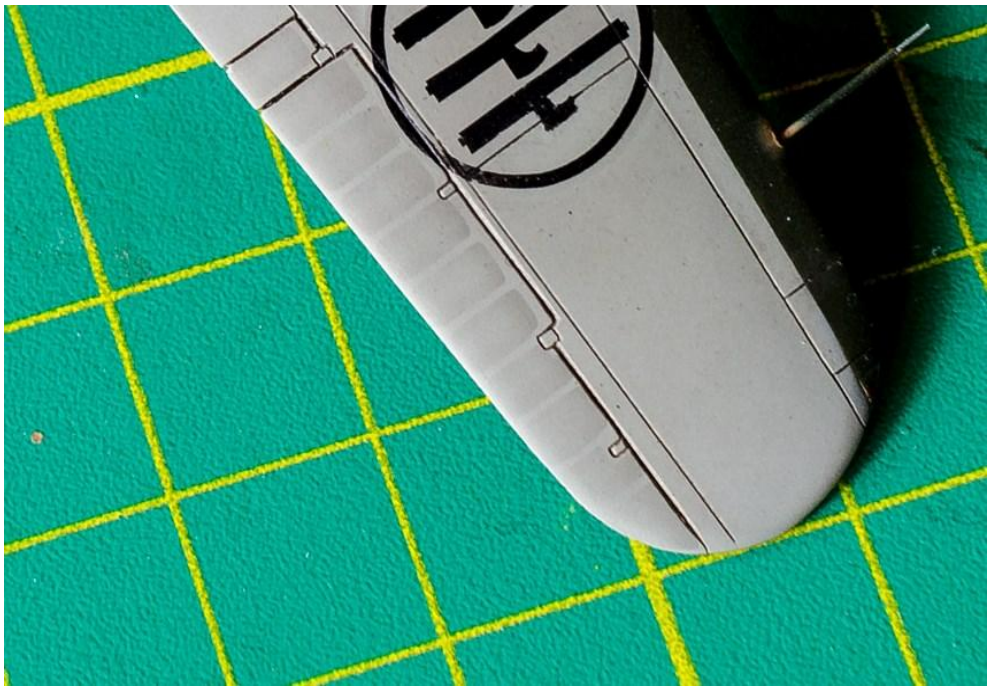
A short digression:
Sometimes there are various hinges, actuators or position lights, which are too prominent to cover. There are none on the Folgore, so see below a Hasegawa Wildcat as an example.
Masks have holes for the hinges and there are small eyelets around. You can fill the holes with maskol and the eyelets prevent it from spilling around:

On some sheets, instead of eyelets I made small oval shapes which you can use as covers. Let me know what solution do you like more. At the moment, I am inclined towards the eyelets.

I use the well known, so called **"Wauchop mix", i.e. a 1:1 mix of black and red brown**, diluted into a "dirty thinner" ratio. As alternatives, you might consider Tamiya X-19 Smoke, or, for single tone camouflages, simply a darkened background color. I got best results with the "Wauchop" though.

One more option to consider: in a recent issue of Modelář magazine, Zdeno Bugáň mentioned using just a matt varnish and letting wash and weathering, which will naturally stick more to matt areas, do its job.

I spray with 0,2 mm nozzle with needle cap removed for maximum precision. I try to spray along the mask edges, not on whole surface uniformly. First stronger line along the wing-aileron border, then slightly less along the perpendicular ribs. Be careful! Many times when I thought "now it's just right" it was already too late. Therefore you should always stop earlier than you think :) As long as the mask is still on, it is very deceiving optically, especially if the mask is darker than the surface. It looks like you did not even start spraying yet and then you remove the masks and with great surprise gaze into the dark windows you just unknowingly created :)
On the other hand, if you do the shading on clean fresh surface, you might go a bit heavier as everything willl usually blend together in the end after all the weathering and varnish.



And that's it. Intensity seems to be just right. As for the pattern and definition of shading, there is always room for improvement. Which leads me to chapter announced earlier:

Foolproof Tips For Beginners

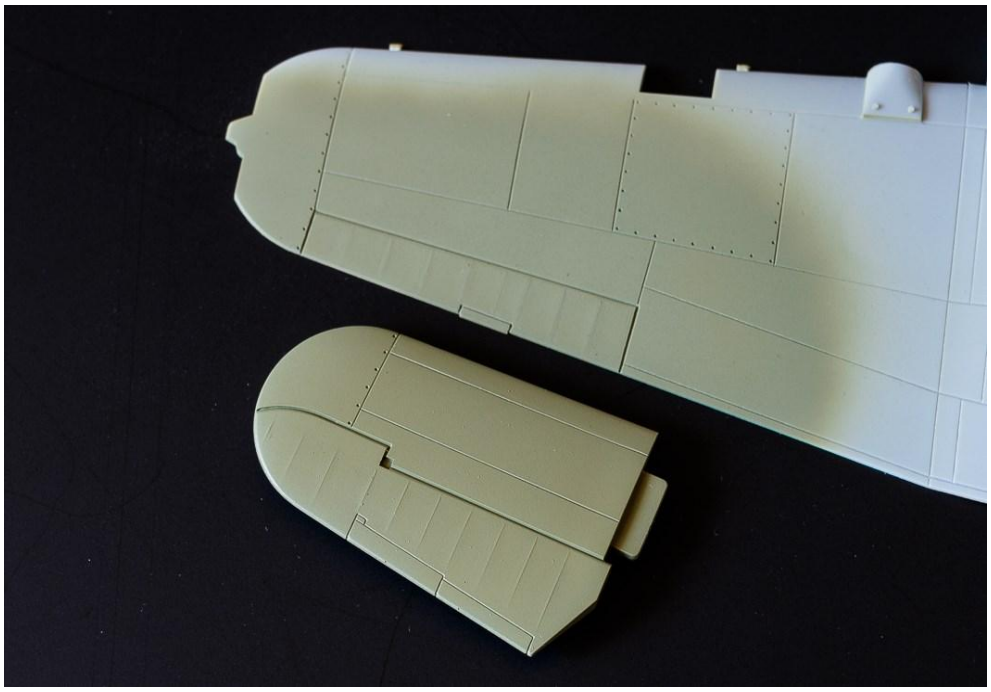
I truly believe this technique is easily manageable by everyone and even though the first result won't look like David's Ca.310 above, it's still going to be well worth the effort.

Even if you don't manage to make that nice, defined shading along the ribs, **even simple, uniform shading sprayed all over the surface will look good,** and in my opinion, better than 90% of what manufacturers offer molded in plastic.

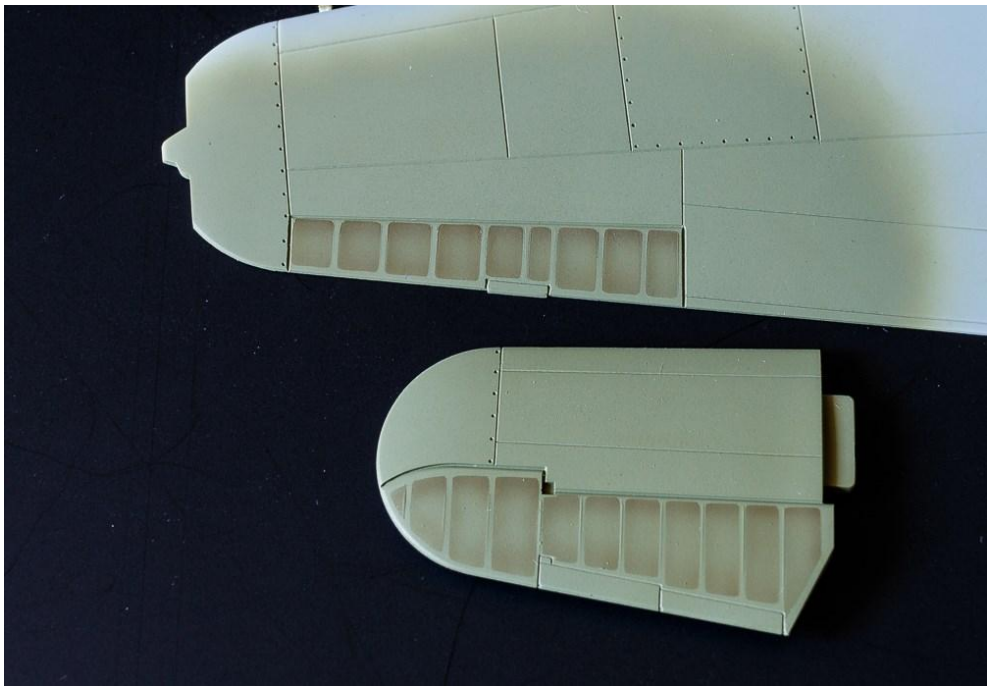
If you are afraid of overdoing the intensity, here are some options:

a) **Overspray the result with diluted background color**. Here, see a Hasegawa Beaufighter as an example (it also shows how the effect looks on top of the original fabric effect in plastic).

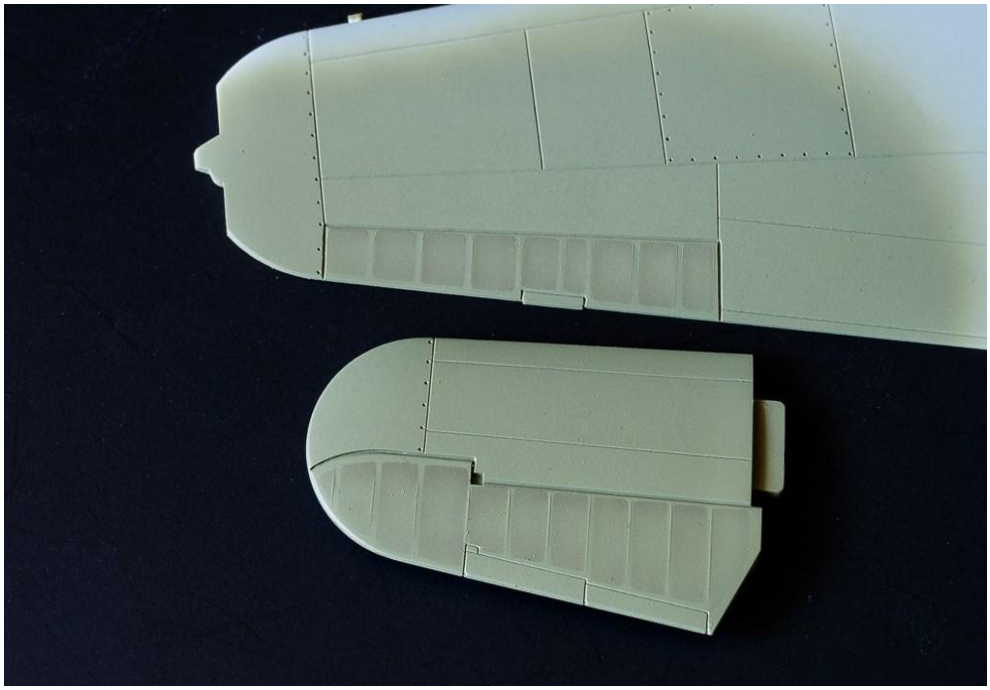
Base green coat:



Umm I guess I got carried away a bit - the abovementioned "dark windows" in practice :)



A light mist of green and few minutes later it looks just right:



b) **Use the masks for preshading**

.Simple as that. I don't use preshading myself but for those who do, this is probably the ideal solution. Spray it with pitch black and then work with thin layers of camouflage. By the way, the masks could be used several times without trouble (as long as you protect the sticky side from dust and dirt), so if you obscure the preshading too much, you can still adjust it afterwards using the normal method.

c) **Use synthetic (enamel) paint for shading**

Spray it on acrylic / lacquer surface and then if you don't like the result, simply wipe it away and try again as many times as you wish. In my experience, even "softer" acrylic paints like Vallejo are virtually inert to synthetic (enamel) thinners. Use a good varnish in between to play safe. This is the best method especially if you apply shading on top of a more complicated camouflage which would be hard to touch up.

d) "**Negative masking"**

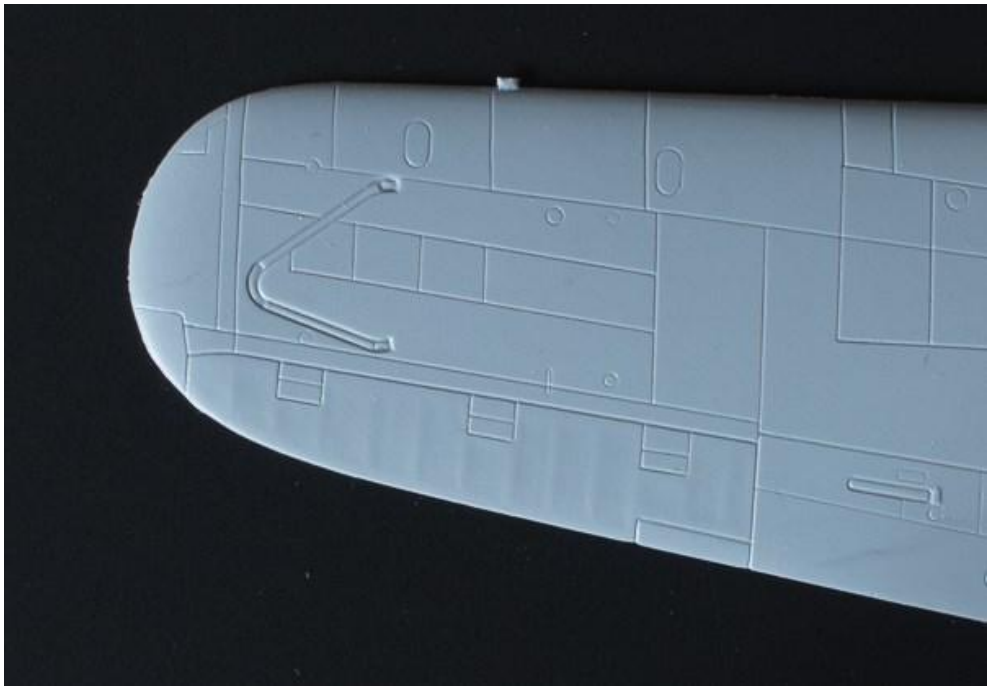
Theoretically, instead of the mask itself you could take the inner "windows" from the backing paper and then build up the wing ports with surfacer. I didn't try it, but it could probably work good enough. Why not?

That's all. Some examples follow. I will add more later.

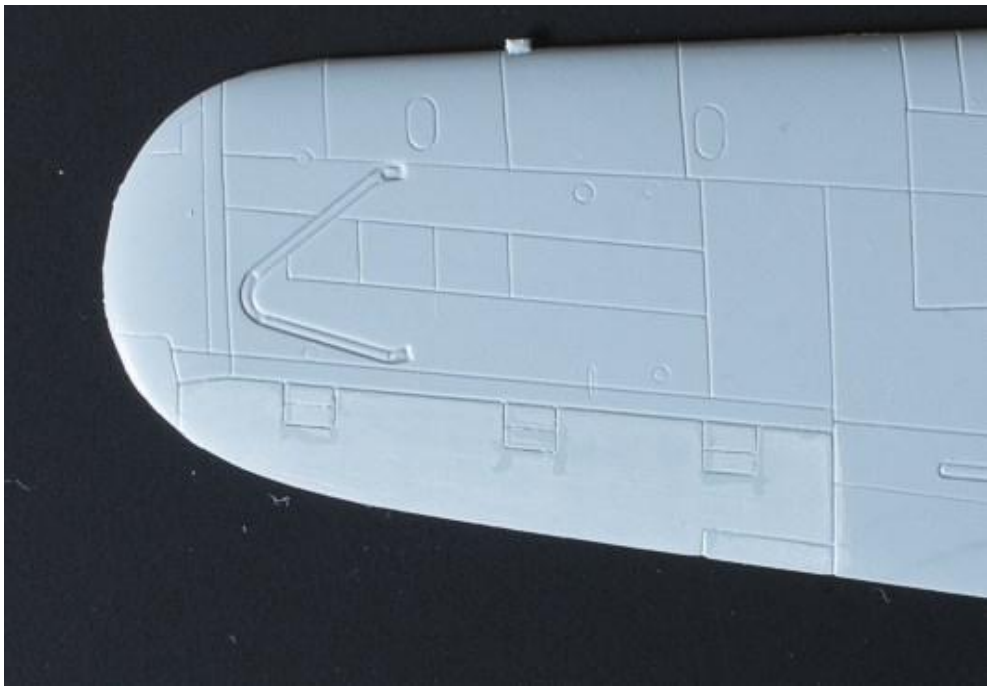
Examples

Barracuda by Special Hobby:

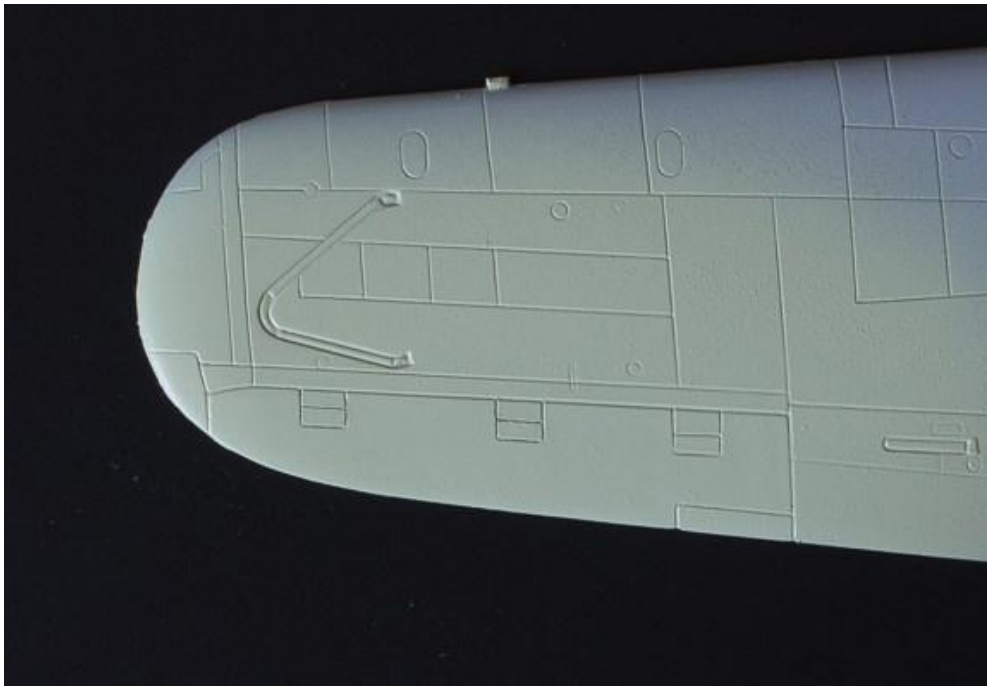
Original fabric effect in plastic. Not bad, but it's a typical short run issue, bit crude and bland at the same time:



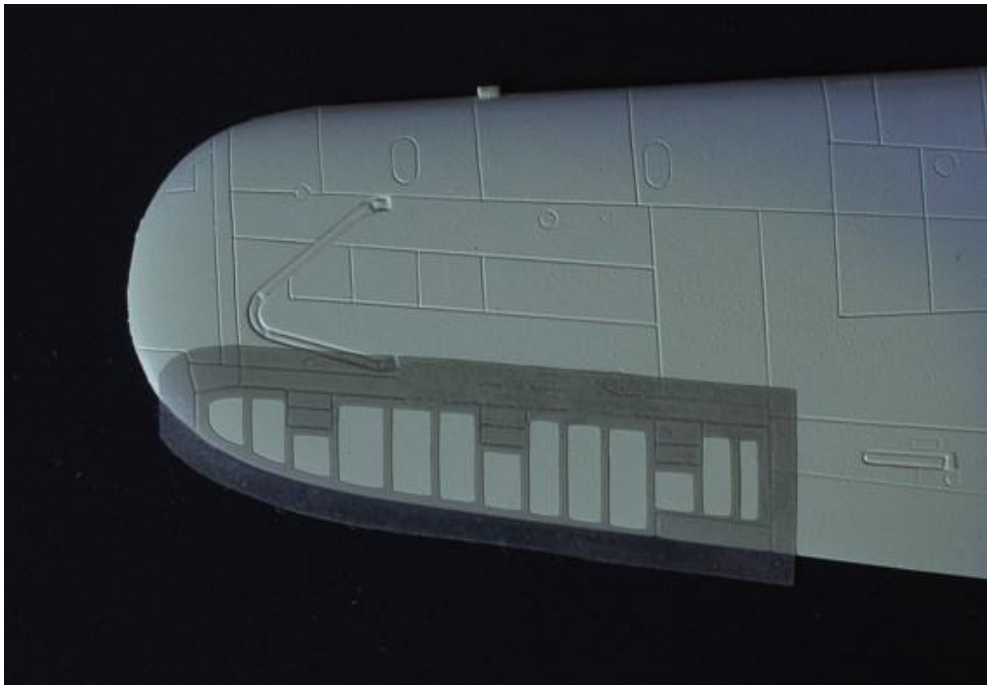
I sanded it smooth, rescribed and cleaned the lines with Tamiya Extra Thin glue:



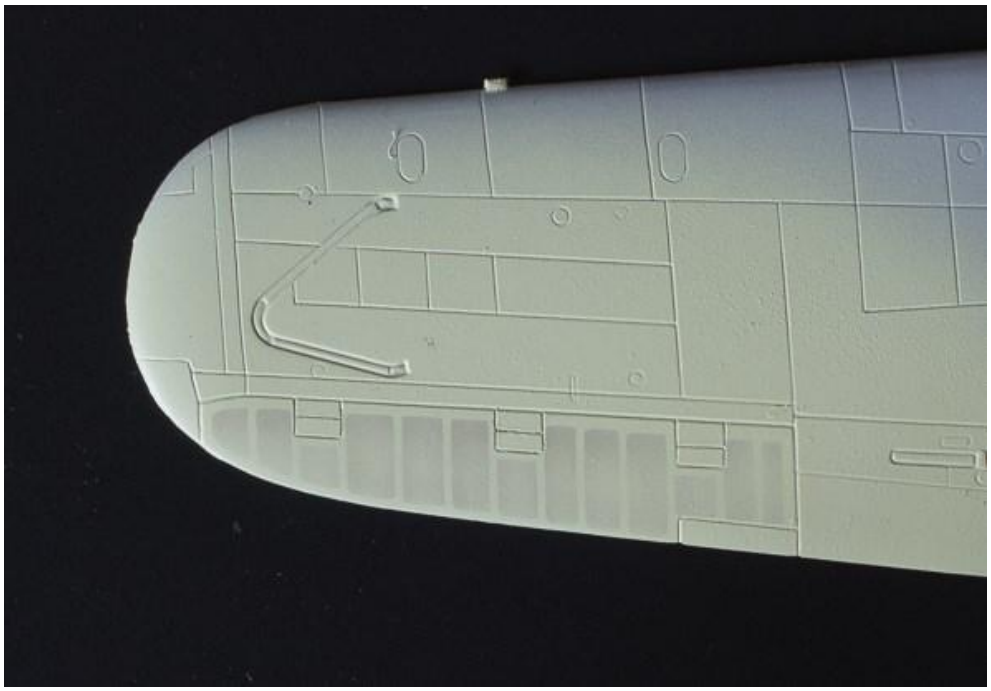
A base coat with Gunze C sky. Never mind the pebbly surface, I didn't bother too much with a proper thinning ratio:



10 minutes later I applied the masks:



Done, this time it looks quite right at the first attempt:



Caproni Ca.310

Just a very quick attempt on top of the existing crude fabric effect, just to show that the method is usable even on silver surface. It's a bit hard to show on a photo, but in reality there is an interesting light play. Also, I love this insanely complicated rib layout :)