

Here are my feedbacks on the MIG-29S model you released as a beta version, in a more “readable” format. Note that I left the links to our web server so you can see the pictures in higher definition if needed.

I - Animations

I noticed five issues:

a) The air intakes

In my opinion, that's the main problem I've found. I have seen that the subject has already been discussed on the forum and that it is not possible to animate them the way they should be. However, I think it could be improved by animating it the way it has been done by ED:

- Engine OFF: main Air Intakes open / additional ones (on the top of the Apex) closed
 - Engine ON (on the ground): Main Air intakes closed / additional ones opened
 - When the nose gear is no more touching the ground, the main Air Intakes get opened / additional ones get closed.
- This the way it has been done by ED (triggered by the nose gear on ground or not) and I think it is quiet close to reality.

At least, with this solution, it is impossible to have all air intakes closed at the same time which is not not the case with the way you chose to model it.

Indeed, you chose to link the animation of air intakes with the flaps but what about during taxi without flaps or if you take off full afterburner without flaps? What if your hydraulic is down and you cannot extend the flaps? In these cases, all air intakes are closed and the engine is still running which is (in my opinion) unrealistic.

[Air Intakes](#)

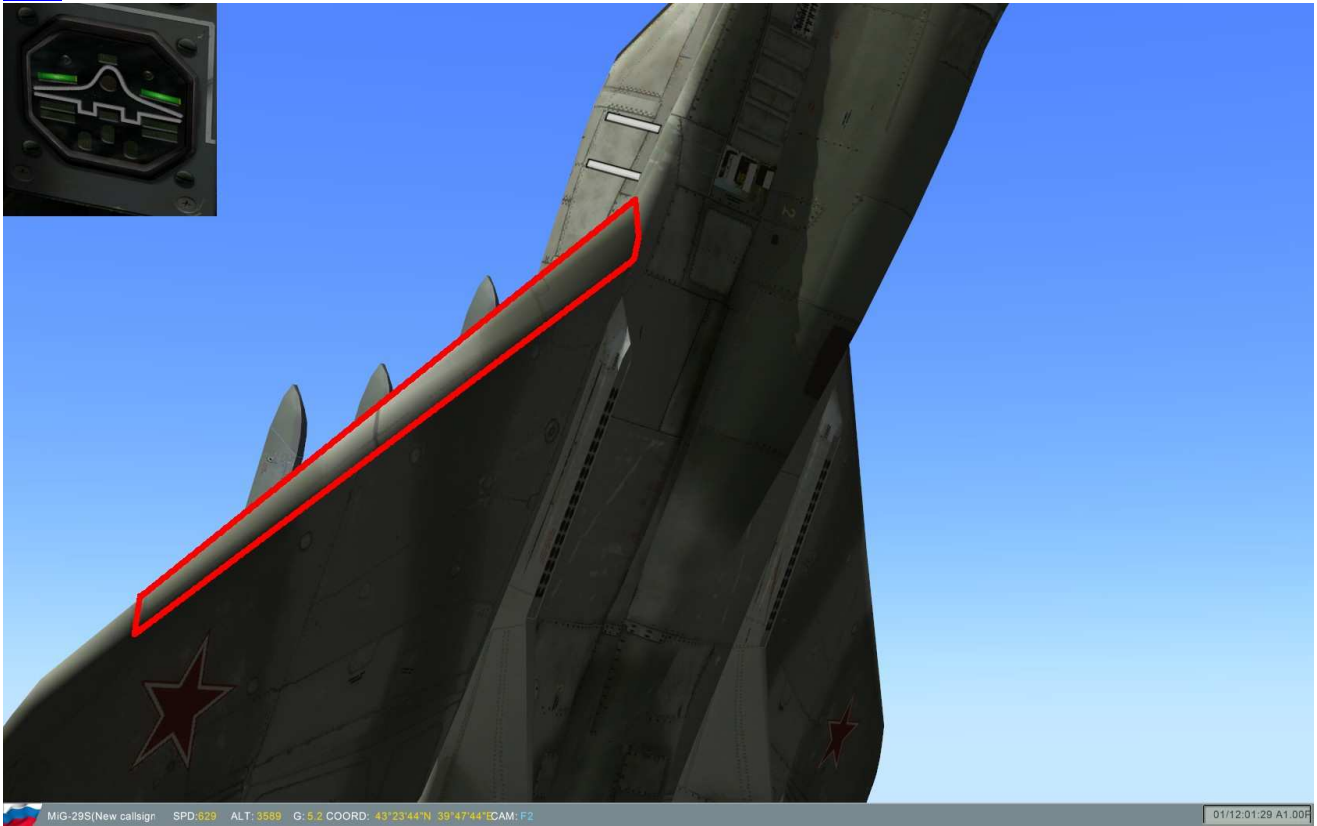


Here, both additional and main air intakes are closed.

b) The slats (moving leading edge).

In your model, you chose to link the animations of the slats with the flap extension/retraction. It works well but in reality and in ED model, the slats get extended above a certain angle of attack (even if the flaps are retracted). Is there a reason why you chose to animate the flaps the way you did?

[Slat1](#)



Also, when extended, the slats are not getting down enough. It should extend a bit more. See picture below.

[Slat2](#)



c) The horizontal stabilizers

They are (in my opinion), not moving with enough amplitude. See this picture from the MIG-29OVT. It is on the ground so it may be exaggerated but I think that you could increase the stabilizer movements amplitude.

[MIG29 OVT](#)



d) The engine nozzles

They are getting too wide opened in full afterburner. Check out [these videos](#) and [the discussion that follows](#). It explains the way the nozzles should be animated (maybe not possible in Lock on).

e) AI Plane

When an AI plane lands and stops at the parking area: after a certain time, the pilot disappears (OK) but also the seat disappears (not OK).



II- The shapes

The general shapes of the plane are quiet good and close the real ones. However, there are some issues that could be corrected and that would make the model become a "must have" as the Gys F15 is or the 3GO SU27 are:

a) Side view



Here we can see that the nose is pointing too much down (a bit) but mainly the problem is the cockpit that is too high. If the cockpit came down at the right position, the nose would be almost perfect and the back would no more be too round.

The tails shape could be adjusted as well.

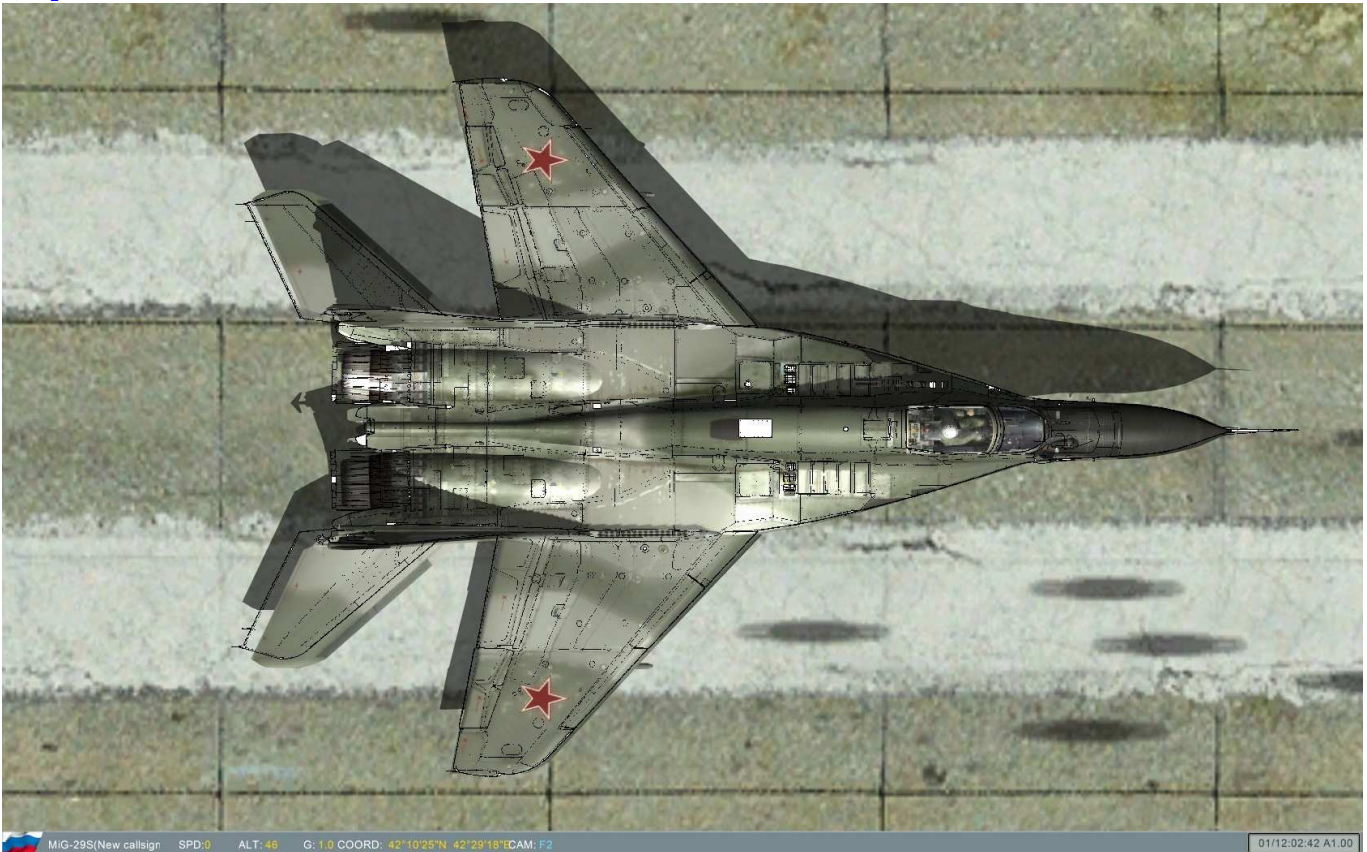
Also, note that the antenna on the back is missing.

b) **Front View**



On this one, the main problem is the air intakes. Apart from the dimensions (which is not a big problem I think), they should not be vertical. It was not obvious because my picture is not good so I pointed out in red the blueprint shape and in Blue your model shape.

c) **Up view**



This one shows that the global shapes are quiet good. The only thing that would need to be corrected are the horizontal stabilizers at the back of the plane. Their shapes are not matching the real ones.

d) **Angle of Attack indicators on both sides of the nose:**

They are set as if the aircraft was on the ground. Since most of the time we are flying with this bird, I think it would be better to have it just straight. The shapes of the indicators are OK but not perfectly accurate. See picture below:

[AoA indicators](#)



e) EOS & Pitot tube.

The EOS and the pitot tube on the right side of the nose could be improved.

- The EOS "platform" (the place where it is sitting) is not accurately designed. I don't know really how to explain that and hope that the picture below will help you understand my point.
- The pitot tube is not accurately designed but more important: it should be pointing down a bit.

[EOS and pitot tube](#)



f) The Airbrake and generally: the back of the plane:

The back of the plane is not accurately designed. Actually there is like a "cylinder which is not there on the real plane. It looks like a mix between the MIG-29 and the SU-27. (Also the parachute case diameter maybe a bit to big)

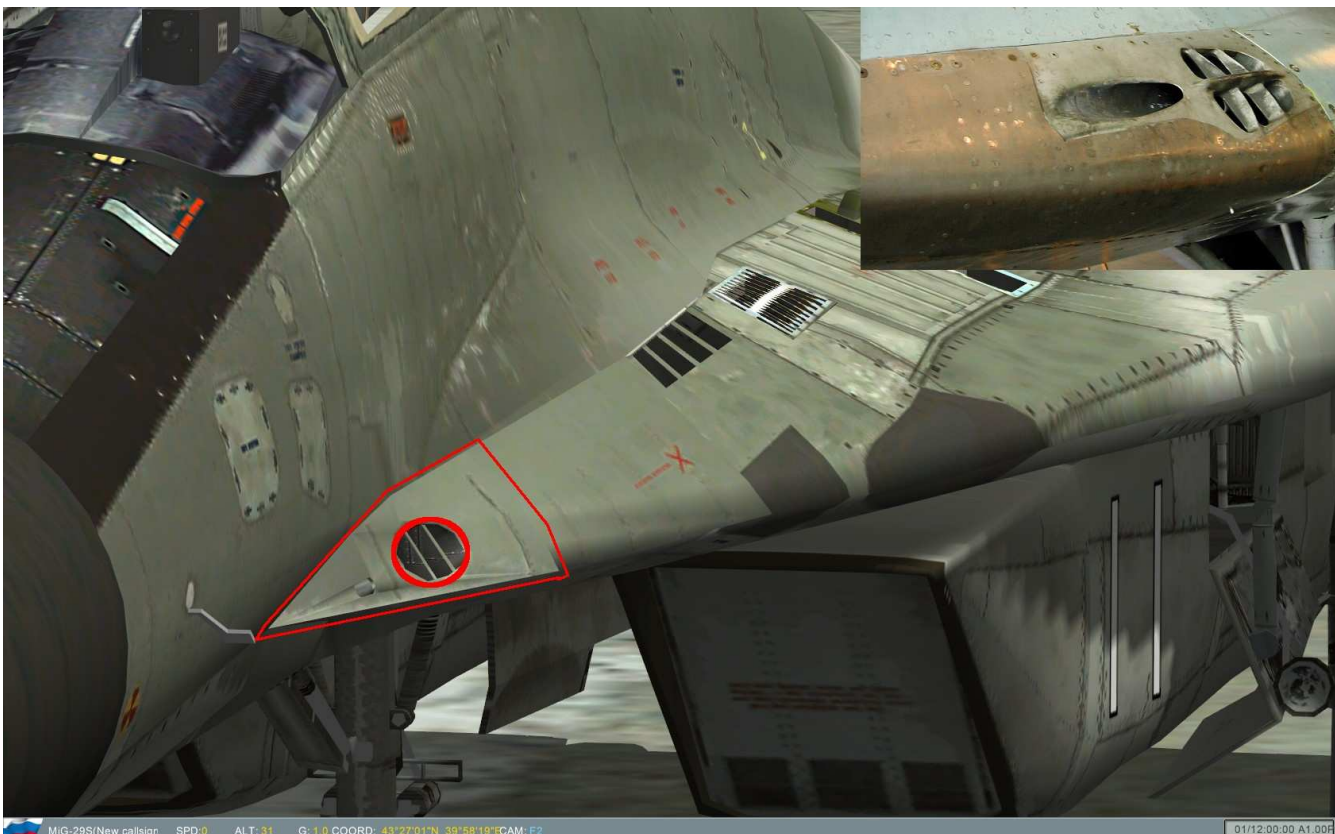
[Airbrake](#)



g) The gun and the the apex junction to the airplane body:

The Apex leading edge should be curved all the way long. It is the case on your model except at the gun area where it becomes extremely sharp. Also, the gun "exhaust" could be improved. See picture below that illustrate my point.

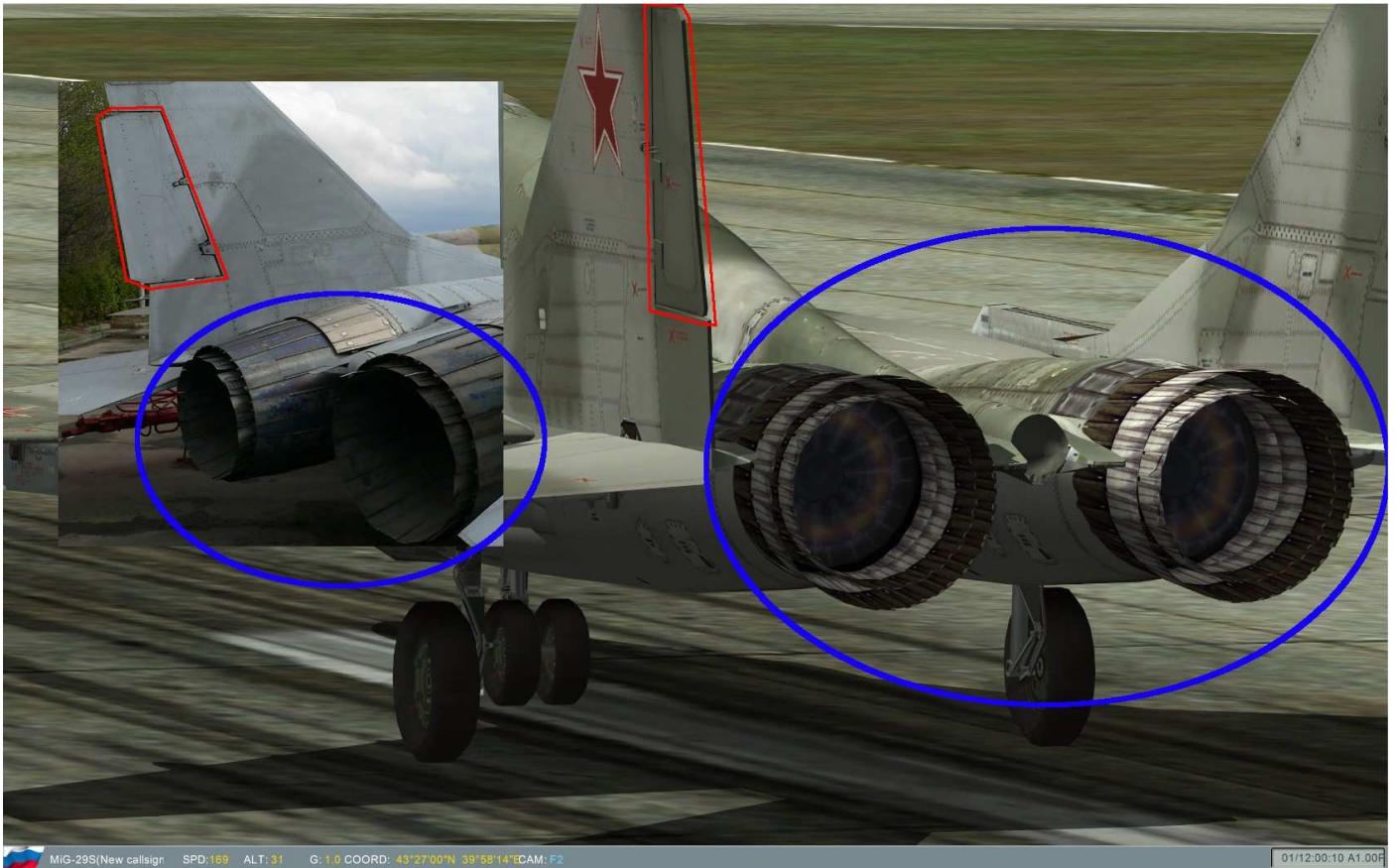
[Gun and Apex leading edge](#)



h) The Rudder and engine nozzles:

The engine nozzles are getting to wide open in full afterburner and the rudder plates should be larger See picture below:

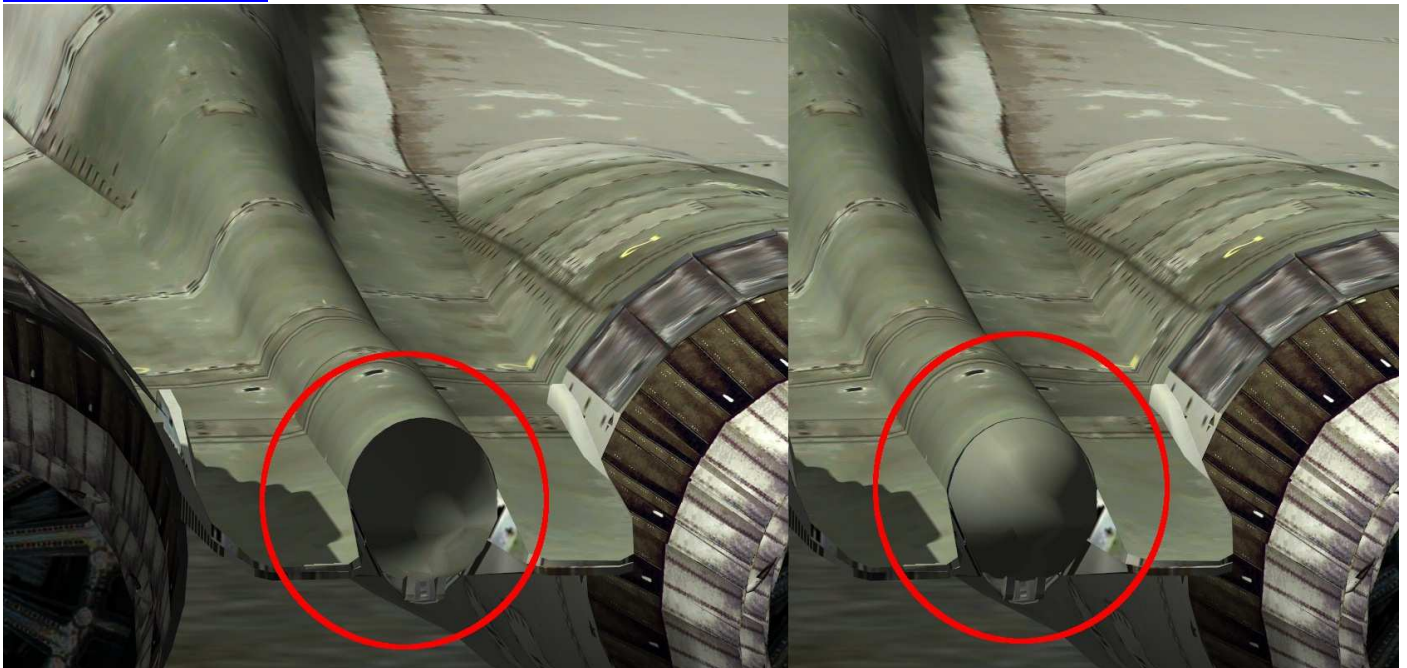
[Rudder and Nozzles](#)



i) The texture of parachute cover

It is shimmering. See screen below to illustrate my point. It happens all the time when moving the camera in F2 view.

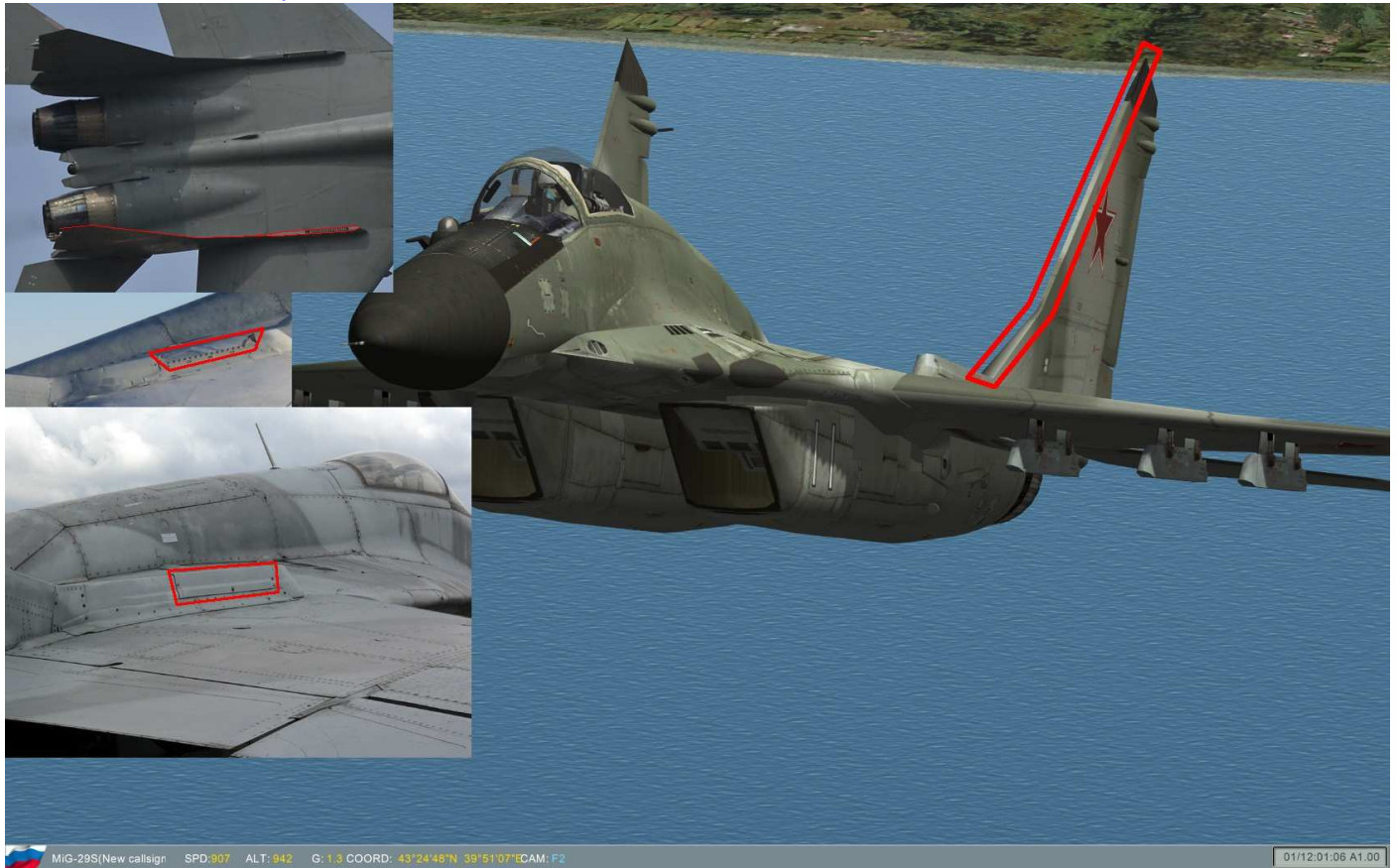
[Texture/Shadow issue](#)



j) The vertical tails and flare/chaff dispensers.

The leading edge of the tails is too thick. It should be very sharp and getting wider only at the flare/chaff dispenser level. Also, even if the structure of the dispenser is OK, the texture showing the flare/chaff cartridges is too long: in reality, it is much shorter (about half of the length of the structure I would say).

Tails and flare/chaff dispensers.



k) The air intake of the APU is missing on the left side of the plane:

APU Air intake



l) The HUD is weird.

I don't know how to explain in writing but the picture shows the problem:

[HUD issue](#)



m) The antenna at the back of the right tail is not accurately designed.

It should look like that:

[Antenna](#)



n) I have a problem with the grids at the back of the additional air intakes.

The picture explains the problem.

[Grids](#)



o) The nose pitot tube is not accurately designed.

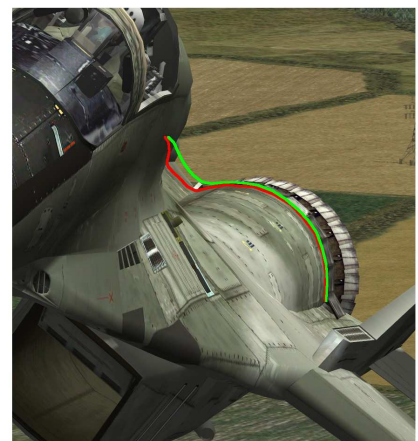
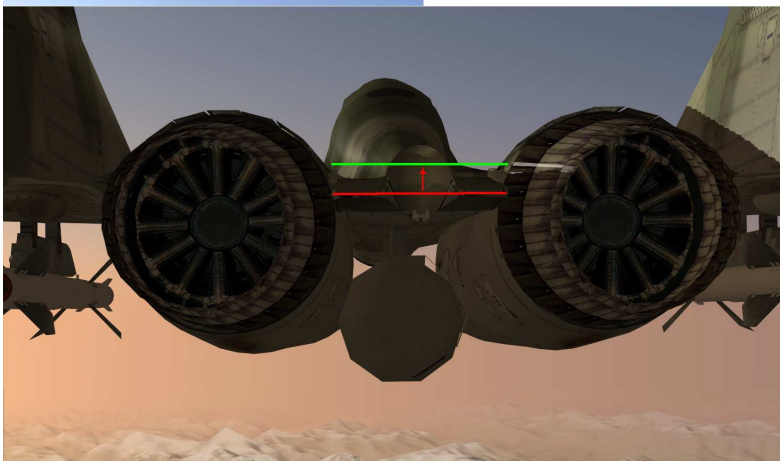
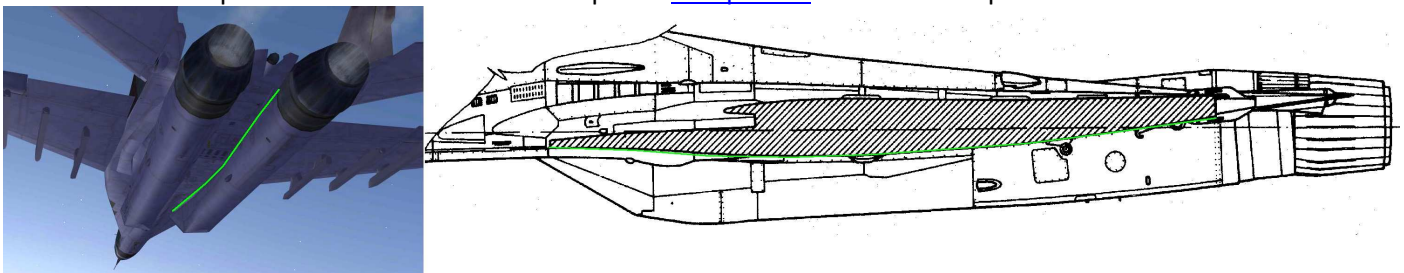
I think it is a shame because the little blades on each side of the pitot tube are extremely important for the airplane manoeuvrability at low speed. Indeed, it generate vortex that help the pilot keeping control of the plane. Since it is an important characteristic of this plane, I think it would be good to have it correctly designed...

[Nose pitot tube pictures](#)



p) I think I found the source of the airbrake/back problem (described in section II-f)

In fact, the belly of the mig is “curved” but you actually did it “flat”. Because of that, you airbrake is a bit to low which induces shape mistakes on the back of the plane. [This picture](#) illustrates the problem:



In green is what I believe to be the right shape (top left is ED MIG-29), in Red is your model.

III- Questions & Development ideas (not necessary at all but could be nice):

a) The model is not "high poly everywhere".

For example, the canopy is still not very smooth. Is there a project to make the model smoother (like the 3GO Su27 for example)?

b) The canopy has not light reflection

as the Gys F15 or the 3GO SU27 have? Is there a reason why you didn't implement this feature?

c) The new lights (position and landing)

They are quite nice because very bright. However at longer distances, it is not very nice. Is there a way to correct this? I know that in FC1, the AdA mod team managed to implement the SU25T lights on all other flyable aircrafts. Maybe you could do the same here?

d) Idea #1

You could animate the AoA indicators on both side of the nose by linking them directly with the AoA of the plane (like the stabilizers at the front of the SU33 are animated).

e) Idea #2

You could model the inside of the EOS (as 3GO did on their SU27), and link it to the pilot's head movements to simulate the helmet mounted sight (would be nice for people doing videos).

IV- Damage Model

I love all the details you modeled under the skin of the plane. That's very very nice. I still have a few remarks though:

a) When a wing breaks out (you went too close to a Molnya for example)

A piece of the wing is falling down, the airplanes goes into a spin but: the wing is not broken!
On [this example](#), I lost both wings but they are not shorten...



b) Generally speaking, I think that heavy damages are displayed two easily.

Actually, I am mainly speaking about the nose of the plane. For example: I'm happy to see my radar when the nose gets off but if possible, I would prefer if the nose could get off only if the radar is broken. I don't like having the nose off but having absolutely no alarm in the plane and everything working fine. Same for the engines where the cover is completely removed but engines are working fine.

c) Generally speaking, the damages are a bit "too clean".

It looks like the screws have been nicely removed by someone and the plates gently removed as well. It would be nice if the holes in the skin weren't strictly following the joints of the plates. If you could do it like it has been done in Black Shark it would be very nice! See example below:

[Black Shark Damages](#)

