

#### Minute 1:

Extended slides are here, and the main slides are in the chat. I'm going to start posting these slides a little bit earlier, and I'm going to start doing recaps. Today it was not a good day to start, just because I am also shifting around my morning schedule, but I'm doing so in order to be able to provide some of these details a little bit earlier. Hopefully the slides should be expected by 7 AM most days. That'll mean that we'll miss a little bit of the context in the slides from whatever might happen between 7 and 9 o'clock, but I think overall it should be beneficial, and it will also allow us to have at least that amount of material out before any type of data point on a regular basis. Okay, so interesting day yesterday overall. We had quite a strong rally all before the open, and then we faded. So it was kind of a strange day, but I think for the most part we did respect some of the inventory. So we rallied in the morning, we came in to the day already up substantially, and we extended all the way through 6010, 6020.

#### Minute 2:

The way I saw this in the inventory, and again the recap slides I'm going to start doing today as well, the way I saw this in the inventory was such that we had a couple of different tests and there was actually a significant void in the inventory in a couple of different places. Primarily between around 5985 and 6010, there wasn't a lot of inventory on the market maker side really long or short. Between 6010 and 6020, we had a long cluster at 6010, really like a standout long strike at 6010 with that fading as you got to 6020. Now inventory never became short, strictly speaking, at least for most of the day. But in that range, as you have the strikes decreasing gradually as we move up in strikes, so 6010, 6015, 6020, 60 quarter, at 60 quarter it was mostly neutral, and then you almost had a v-shape inversion of that same profile. What that creates is a range. And inside that range, it creates passive selling flow as the day wears on, bringing price back to 6010. If we crossed through 60 quarter, the day would have evolved a different way, where we had a huge long strike, market maker long strike at 6040, it would have dragged price up.

#### Minute 3:

So it would have removed some of the influence that was pulling it down and put us in a range where the passive flows would have shifted to buying. And so that's why I kind of talked about these things as ranges and tests. So the range between 6010 and 6025 implied passive selling flow if we could not get out of it. And we did not get out of it. We saw ourselves return to 6010 and then eventually fade back down. 6000 was what I considered a test. There was actually some hedging on the 6000 line. And the way I view that then is if we reverse off it, we expect to have this range between 6000 and 6010 pull us back up to 6010. Passive buying flows, right? And then if we

actually fell through 6000, which you can see here, it's not huge. These images I'm going to make a little bit bigger next time. But you can see here, we actually sliced right through it. And in doing so, I guess it was more of this whole sequence here falling away from 6010 through 6000. We didn't recover it. And what happens at this point, as we fail to recover it, it creates a new range.

#### Minute 4:

So this test was failed to create a new range between 5985 and really the strong case 5970. But between really 5985 and 6000, this first range was bearish. So again, it's because we have short options above, long options below at that point. And that creates passive selling. The question right here, can you elaborate why 6010 range was passive selling? So 6010 through 60 quarter, the range defined by 6010 at the bottom, 60 quarter on the top, that creates passive selling as the day wears on. It's like an intraday pocket that emerges because of the zero-day profile. So we can have overall one charm picture, but throughout the day, it will emerge as something else. And sometimes I would even argue that we'll see the zero-day implication drown out the rest of things, right? And so because 6010 was the largest long strike in the range above us, the strikes became increasingly small, at which point 60 quarter was virtually no inventory at all. And then between 6025 and 6040, they became again, progressively larger and larger.

#### Minute 5:

So at 6010 through 6020, that range was mostly going to be dominated by the 6010 strike. But if we broke through 60 quarter, it would start to fade away, lose its influence. And the 6040 calls were much larger in size anyways. So that would have then dragged us higher, like a little bit of a levitation towards 6040. Below 6010, like between 6000 and 6010, that range would have emerged as passive buying, dragging us back up to the market maker long. So always think of the local market maker long, whatever strike is the biggest in the range, as being magnetic. And the market maker short, or the biggest short strike in the range as being repulsive, almost like magnets of the same pole. Slipping through the range created that new range where now the flows are implied to be bearish. And it obviously met real selling as well at some point. And so we had some hard selling through this... actually, there's kind of a void in the profile. It wasn't much in terms of negative gamma on the zero day profile, but there was a void. We had negative gamma at 6000 on zero day options. Again, long gamma overall for the entire thing, but zero day options sometimes seem to have greater influence intraday.

#### Minute 6:

We had a void that we slipped through, and we then consolidated a little bit at 5985 and then right above the iron condor. We eventually did get pinned or like stuck to 5970 for a little bit at the end, as you can see. But we had enough buying towards the close, which interestingly enough was flagged in the RTM room, the Return To Mean room. Very frustrating for me, but interesting to see and observe because I don't understand the mechanics exactly of why it happens or who's exactly doing this. Whereas options I can explain very clearly. We had mean reversion at the end of the day that put us right back up towards the implied pin from the Return To Mean room. So I think it's very interesting for me to see that despite the dealer gamma flows being very clear, very obvious rationale for why we may or may not end at a certain level. This mean reversion at the end of day sometimes overtakes this significantly, and it seems to do so in one fell swoop. And so yesterday's close was strictly speaking, not a very likely pin when it

#### Minute 7:

comes down to dealer gamma flows, because again, it was a short strike, market maker short strike, we should be repelled away. But again, that's the type of thing where if dealer flows are the only thing going on, that would be like the last thing you'd expect. And that was implied by the RTM room. So interesting and very valuable to have that insight to the end of the day, because I think it would have been obvious to me, and I think many others to play the pin at 5970, which didn't really work in the end. Yeah, the move did get pretty extended at some point. And it got extended through a negative gamma type of pocket as well or like a void. And so coming back to earth was not entirely surprising. But sometimes it's pretty surprising how precise it can be. Today's overnight range, again, just trying to think through these same concepts or same principles, right? So today's straddle \$31.75, 53 basis points, we had a decent overnight range. Again, these are not like perfect zero day or one DTE straddle prices. I always take mine at variable times. It depends on my schedule. So you can thank my kids and their variability for that. But for the most part, going forward, it's going to be a 6 AM snapshot.

#### Minute 8:

So it's not going to be necessarily the same things you'll get elsewhere. It'll be the 6 AM snapshot, which means that the overnight decay has already happened to a large extent. This will be the time at which most like market making desks start to wake up and maybe influence things. So there still might be some utility there as long as the pricing is consistent, which it should be going forward. The overall picture today, we do have long gamma, but it's low. So it's not quite neutral. It's somewhere inside of that, you know, the profile as you'll see. And I'm going to move on to the next slide. You guys can read the test and ranges yourself and work through why these are the case. But you can see the dealer gamma profile overall is somewhat light. There's like a major

feature in the background, which of course looks like a call wall. And it's not a perfect traditional dealer profile, but it is positive speed through here. So when you look overall, what you see is there's a minimum gamma right here. There's a gamma minimum down here near 5915 that emerges and actually gets drawn in towards 5940. This is just a function of the strikes decay, the Greeks decay over time. But we do have a call wall at 60 half, some of which is in the zero day profile and some of which is in the regular inventory behind it.

#### Minute 9:

The inventory that's interesting here, again, it's mostly light gamma overall. I wouldn't call it neutral, but it is light and it gets very neutral if you're between 5900 and 59 half. The interesting things here are the iron condor strikes. So we had the iron condor seller come back yesterday and he sold the 5940-45, 6005-10 iron condor around 9,000 times. Maybe we'll break this now. We're already kind of through it implied. Like again, these slides don't have the full price action, but right now we're trading 5993. Sorry, we're not through it. But we're running up to the call strikes, of course. It'll be interesting to see how this guy does in the Trump volatility era. This creates a range, obviously. So the way I see this is we have ranges and tests. The easiest starting point or really yesterday's close or right there about the first test was 5980. So crossing this zone at 5980. Coming across this zone here creates a new base case that emerges into the latter half of the day.

#### Minute 10:

Now, you'll notice that when I say these things, I say them as I'm disregarding this to some extent. Not really. What I'd also like to recommend is don't over rely on the charm flows until at least around noon. You know, we talked about in the RTM room, the importance of London close. And I think certainly you guys will notice there's a character change sometimes that's severe at 11:30. I wouldn't use the charm implication too much until noon. And so we know that there's a lot of liquidity that happens or a lot of trading volumes that happen on the open and the close. And I would argue that there's still a reason to avoid really relying on this passive flow for two reasons, because it does seem like there's a different type of market behavior in the first half of the day. The other reason is very obvious. The mechanics alone, just strictly speaking, as the options decay, that's when the influences pick up steam. And so that's the second half of the day. Oftentimes, these ranges and tests will not be clear, like, at this point, because they emerge out of the zero day inventory. But they sometimes do have influence even before they show up on the charm profile and make of that what you will.

#### Minute 11:

That said, this first test at 5980, we appear to have passed that. We're in a range now where what's going to happen as the day wears on is there's going to be a passive bullish flow, compelling a bit of a drift towards this iron condor strike. That's just because this is going to be hedged continuously. But as time passes, that hedged delta, those futures that market makers are selling, has to be bought back. It's not exactly perfect, but it does converge on 6005 in the end. In the meantime, there's a little bit of noise exactly where the boundary is, but you should see that on the charm profiles as it evolves. And that's because the maximum charm influence is going to come from the 20 delta strike, which will at some point be the 6010s and then at another point be the 6005s. Just keep the structure in mind. The end of day, the pin projection would be the 6005 calls if we stick there. If we get through this, then what we're going to expect is a call wall feature. And so if we cross over 6010, that would be the boundary, which would actually start to repel price up as it decays.

#### Minute 12:

And so if we get through this, this would be negative gamma at the iron condor short strike. And then we'd have another drift upwards into a slowing feature, like a call wall feature that does slow us down and also eventually compel a pin. If we sell back off, just reverse the mechanics. 5980 is a test again on the way back down. And it winds up doing something where we now have a short strike above the money and a long strike below the money. If we find spot between 59 half and 5980, that passively creates that trend again, where now it flips from bullish above 5980 to bearish below 5980. And it draws price down to an implied landing zone here around the largest dealer long. That's really just how it works. And so if you guys can start to internalize these ways of looking at this, it'll become very useful, whether you're trading futures or options. Obviously, options allow a lot more creativity, but even just for taking profit on futures trades, it's very useful to think of it this way. Oh, other tabs. Also, there's some interesting conflicting stuff. Somebody was talking about the Rubner note, which the Rubner note seems to lean bullish, obviously.

#### Minute 13:

And I like Rubner's point of view most of the time. But also, there's a little conflicting stuff too. There was some big funding pressure, along with some really big implied professional selling out of the futures space. I think that Goldman has pointed out themselves in one of their notes. And I think this has been pointed out by SocGen and others as well. And we talked about it in the Discord here that there is a lot of signal from this in the past where the amount of selling that happens or that happened is a pretty big forward-looking bearish tell. That happened in 2021, I

think it was. And it seems like it happened again on December 18th. It cleared out that strain, but it also was heavy and persistent. And so it's odd to me. I'm trying to reconcile this before I give any... I'm trying to wrap my own head around their conflicting messages here before I give any insight around it. Personally, I'm a little bit more bearish in 2025. Overall, I'm not saying... I think we'll still have a little bit of a bull trend through at least Jan Opex. But I think overall, I'm a little more bearish in 2025 for a number of reasons.

#### Minute 14:

Obviously, rates being higher for longer. I feel like we're finally manifesting the reality of this regime. I'll make sense of it. And then I will obviously put it in the chat. But yeah, I think there are a couple of notes too. I feel like people are finally starting to catch on to the idea that skew has regime changed. And so that was kind of my hypothesis as far back as March that we were seeing the early signs of skew shifting back to something more normal. The CBOE note the other day pointed out that even in the first half of 2024, we did see a greater amount of up variance than down variance or higher realized vol on up days than down days. But you could see that overall, the skew metrics out of the implied vols kept kind of climbing up. Pretty volatile. But then in summer, it was like the writing was on the wall. Something seemed to happen in mid July, which clearly redefined the entire structure going forward. And after August, it was almost impossible to get back down to first half of the year levels. And reasonably so because the realized moves, the realized vol on down moves started to pick up as well.

#### Minute 15:

And the down moves started to outpace the up moves. I think what people should calibrate for is this whole idea of 25% gains per year or whatever we've had. You should erase that out of your projections. And really at this point, we're going to have much more of a normal regime where we should expect something like the old adages like elevator down or escalator down. Sorry, stairs up, elevator down. And I think that should be much more respected now. Whereas for the last couple of years when skew was low, and I think a lot of people were doing things like equity replacement that probably fueled some of the run ups. That was maybe facilitated or fueled by some of the choices that people were making in the equity and the option space. And I think that that's starting to revert out as well. Yeah, something to point out too. Maybe this is what hurricane means. I want to point out too that skew is not a bad thing. In some ways, like volatile skew is a little bit dangerous or difficult to trade around, but skew in general should mean that people are hedged. It does create accelerant, but it also simultaneously would reduce the need for the real underlying participants to de-risk.

Minute 16:

And so it's not a terrible thing. It also compels a drift. So when skew is like persistently high, you have a more stable interpretation of the volatility to index delta pass-through, because that structure, like a risk-reversal structure is what compels not only the vanna influence, but also the decay influence, which again, as we decay, it forces a hedge buyback and that pushes us higher. So it creates a drift. And it also means that when vol goes down, we should expect to go up. And when vol goes up, we should expect to go down with a greater degree of certainty there. So that makes it a little bit easier. I'm going to end here. I will put some of these research notes in the research share chat. Some of them are already there actually, but I'll add some more. And then I'll obviously talk about what I think about Jan Opex. I do think that some of the like rally that we've been, you know, I do think that some of the like rally that we've been, you know, the rally that should have been priced in after what happened on Dec 18th, obviously happened and it got rejected. I think again, it's kind of running its course and I don't expect that we're going to have any blow off top. I'm very, very, maybe I'm too dismissive of the blow off top, but I don't see anything in the flows or the positions that really justify chasing that idea for what it's worth. Good luck and feel free to ask questions.