

Session Plan

Maximum Velocity Training

Also known as Flying 30/40/50s, this is a sprint interval workout which involves accelerating to maximum velocity and sustaining it for a short distance (30/40/50meters), before gradually decelerating and jogging back to the start.

It's an excellent opportunity to work on delivering maximum power for a short period of time and optimising running mechanics, which in turn helps with race starts, overtaking, and sprint finishes.

Perform this training at least once or twice a month as part of a balanced training program.

Equipment & Venue

This session needs to be performed on a flat straight and smooth sprinting surface at least 100m long.

Equipment: 4 Cones or any marker, such as a geographic feature (lamppost, tree etc), or an item of clothing. A flat and straight sprinting surface; a track is ideal but also a **traffic/hazard free** road or field.

Arrange markers/markers in a line indicating the:

Beginning of the acceleration phase.

Beginning of the maximum velocity phase.

End of the maximum velocity phase.

End of the deceleration phase, which is also the turning point to jog back to the start.

Wear hi-visibility clothing appropriate for the weather.

Warmup (15-20 minutes)

Loosen up any tightness for five minutes with dynamic exercises such as leg swings, arm swings, squats, high knee raises, dynamic lunges (forward and back). Include at least ten minutes of running starting easy and gradually increasing in intensity. Finish the warmup with strides (short bursts of speed) as you prepare your body for the main session.

Main Session (30-40 minutes)

The main session involves four distinct phases that make up one interval:

1. Acceleration (30m).
2. Maximum velocity (30, 40, or 50m).
3. Deceleration (30m).
4. Recovery: jog back to the start.

Phase 1: Gradually accelerate from the first marker and aim to reach maximum velocity by the second marker.

Phase 2: Maintain maximum velocity until the third marker.

Phase 3: Gradually decelerate and aim to be jogging by the fourth marker.

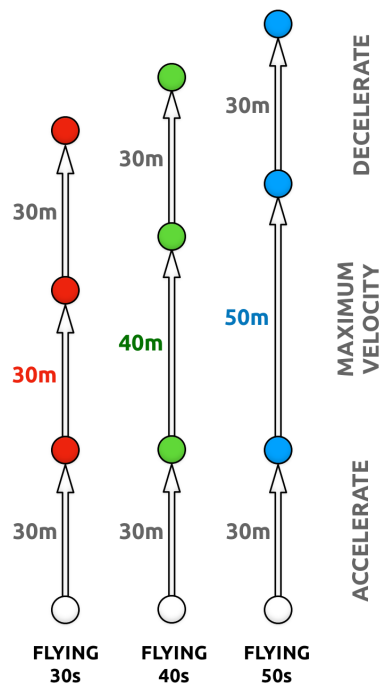
Turn and return to the start fully recovered (i.e. by jogging slowly). Relax your neck and shoulders (this is your active recovery).

Once you have completed one interval, repeat as many as you can in the time allocated. Adjust the maximum velocity phase distance (30m, 40m or 50m) during the session. i.e. run [3x30m, 3x40m, 3x50m, 3x40m].. and so on.

Stop to rest and take on water between intervals if necessary.



Session Breakdown



Cool Down (10 minutes)

Perform at least 10 minutes of static stretches focusing on hamstrings, glutes, hip flexors, quads, and calves.

Coaches Tips

- Take the time to **fully** recover between each interval. The objective is to see how fast you can go, not how fast you can go when you're tired.
- The body's limit of fuel supply during Anaerobic Alactic training is around 10 seconds. 50% of this energy is replenished in 30 seconds. It takes ~3 minutes for complete restoration at rest.
- Instead of straining to go faster during the maximum velocity phase, you should try to 'float' and 'relax' instead.

Competition/Race Tips

- When possible overtake on the left hand side of a competitor runner. Most people are right eye dominant which means you'll have a time advantage before the competitor realises.

References

- <https://www.brianmac.co.uk/energy.htm>