

Theory Lesson # 10

Unit 32 – Soaring with Other Gliders

Aim

This unit covers:

- **Flying safely with other gliders**
 - Awareness
 - Maintaining Separation
 - Predictability

Awareness

Keep a constant lookout when cruising and thermalling to locate other aircraft and predict:

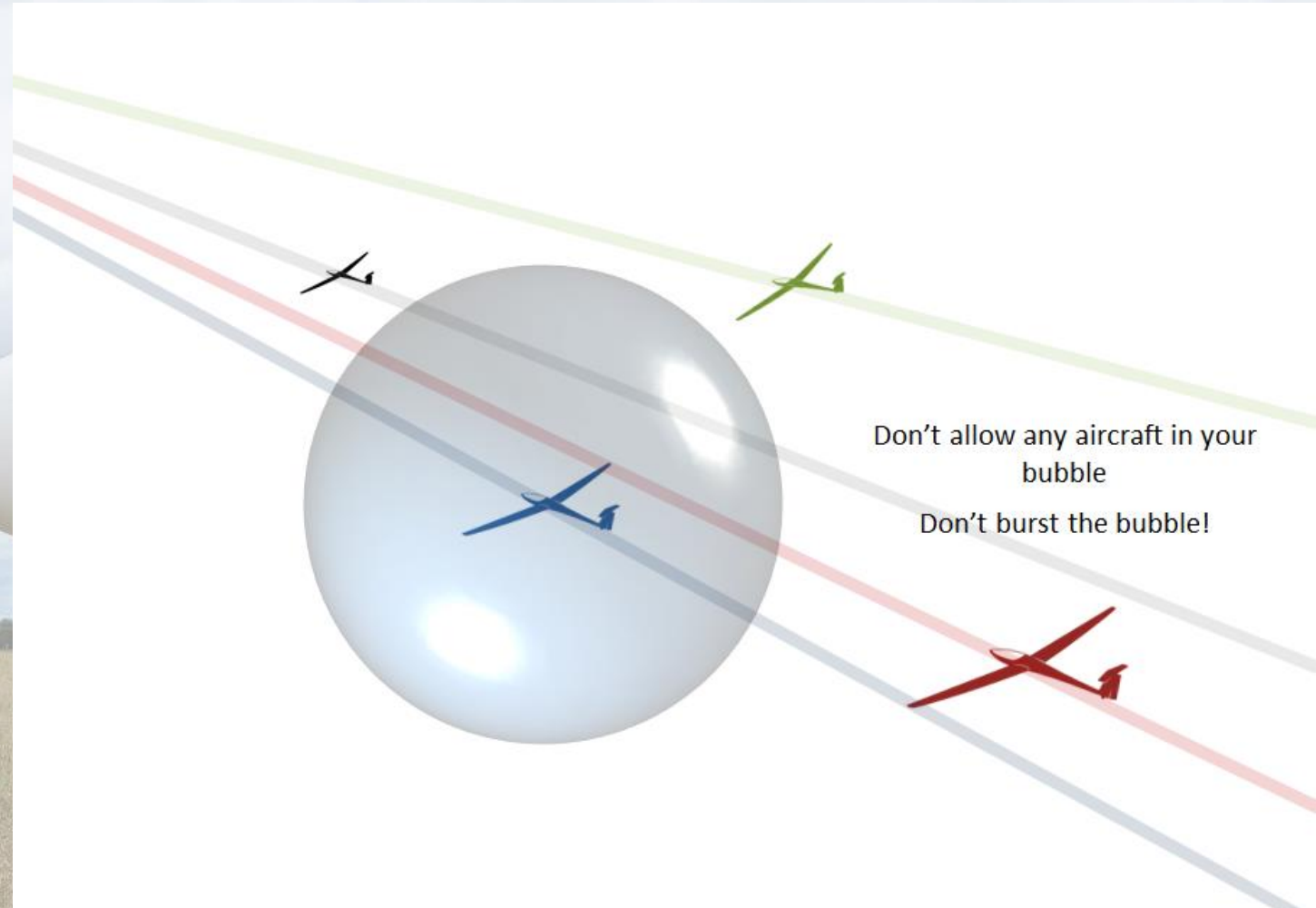
- what the other aircraft might do
- where conflict may occur due to converging headings or converging heights

Use **FULL SCAN** and **TARGETED** scan



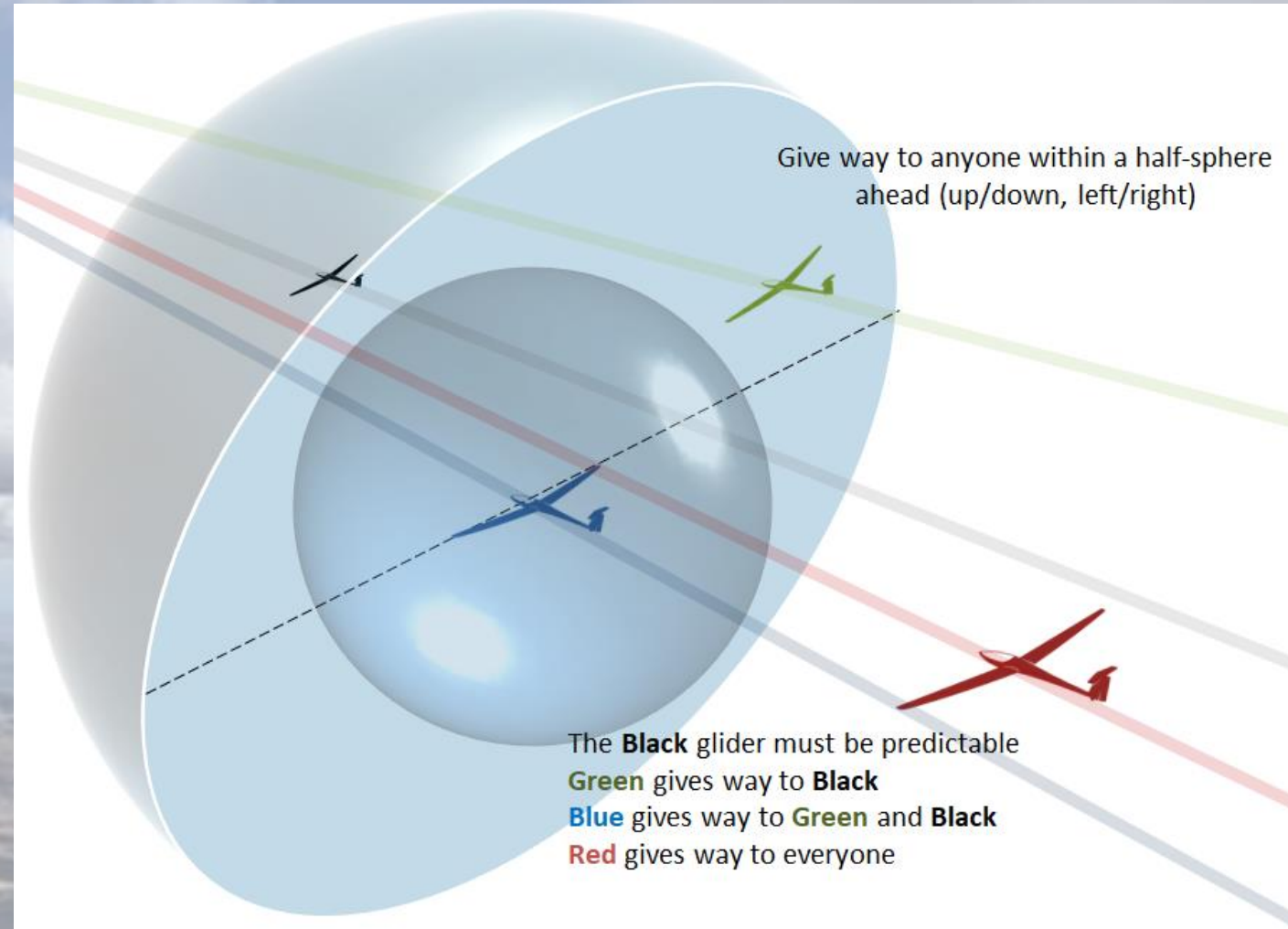
Separation

- Legal minimum separation is 200 feet (about 60m) (a little further than an aerotow rope)
- Imagine a 60m radius “bubble” around each glider
- No aircraft should ever be inside your bubble



Separation Priority

- Give way to anyone within a half sphere ahead
- You must give way to these gliders no matter how the gliders in front, or to the side, manoeuvre
- When overtaking make the other pilot aware – use the radio
- Do not enter double-blind situations
- You can't see aircraft under the nose or over the tail and they can't see you



Predictability

All pilots must behave in the same way when approaching, entering, and leaving thermals, and when making centring corrections

If you are predictable and other pilots are predictable then actions can be anticipated with safer outcomes

Predictability: Approaching a thermal

Conduct a thorough **FULL scan** and **TARGETED scan**

Locate gliders in the thermal and identify their direction of turn to match it (even with very large differences in height)

Plan ahead for your arrival – which gliders will you be joining in with?

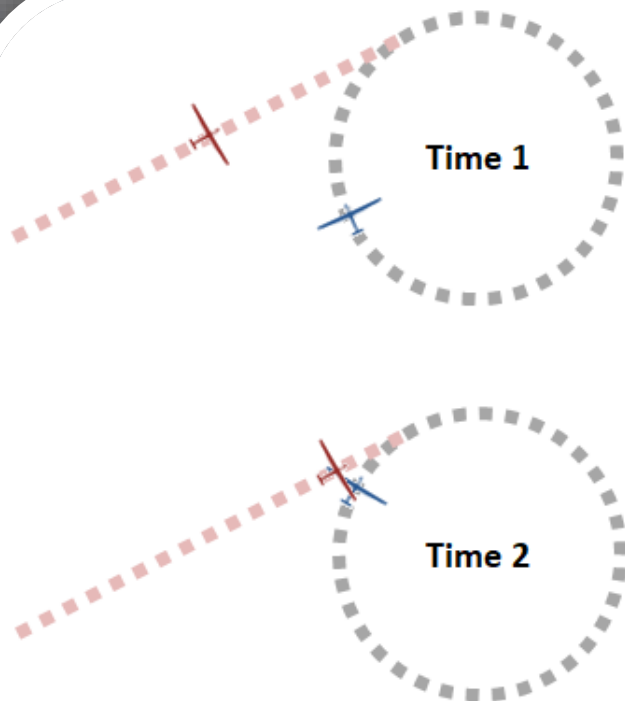
Slow down gradually before arriving to synchronize with the other gliders' speed

Don't pull up in the core

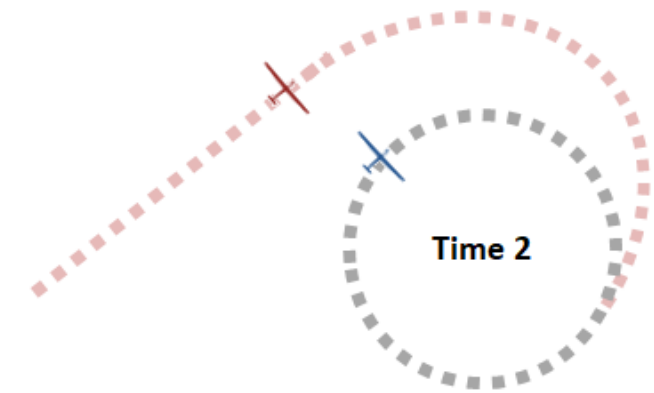
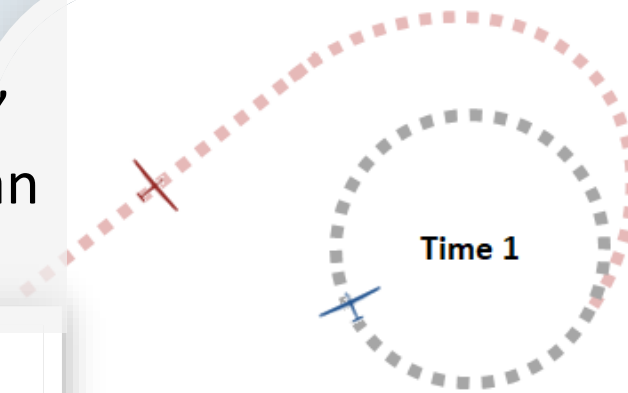
Predictability: Entering a thermal

Join with zero potential conflict

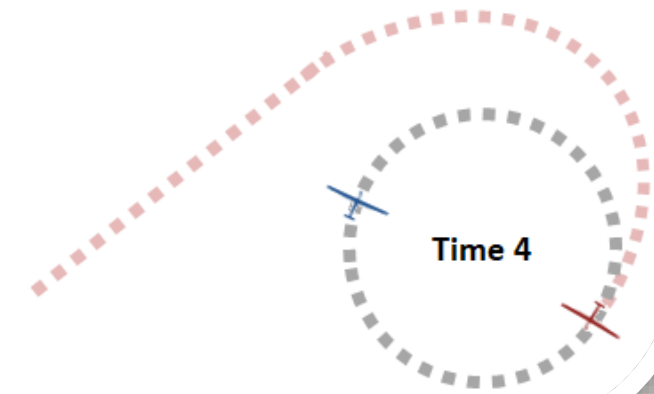
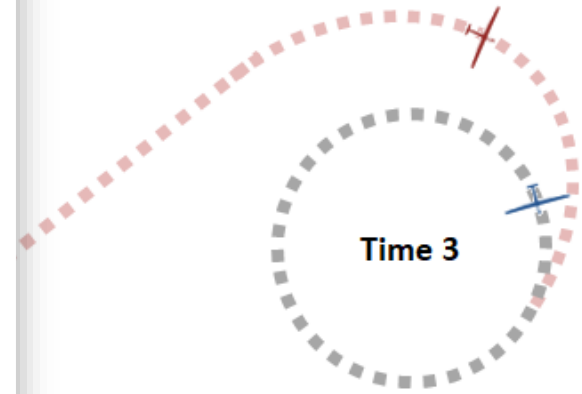
Fly around the outside of the other gliders' circle (with at least 60m separation) until an opening is available or they climb above



Incorrect thermal joining sequence!



Correct thermal joining sequence



Predictability: Thermalling

Keep other gliders in sight at all times

Stay opposite other gliders

Go with the flow – match other gliders bank angle and speed

Accept that climb rate is likely to be lower than thermalling on your own

Make small centring corrections when safe to do so

Do not point your nose on the inside of another glider's tail

Don't turn inside other gliders

Note that one pilot with a small bank angle disrupts the thermal for the others who are forced to follow

Predictability: Leaving

Check for potential conflict and exit with a gentle roll-out and gradual increase in speed

A possible point of conflict is a glider behind and a little on the outside of your turn – check under your outside wing that it's clear (TARGETED SCAN)

If you roll to wings level others will assume you are leaving so don't turn back into the thermal