



DOCUMENT
GSM-EL-PS1.054

DOCUMENT TITLE
PRE-SOLO SELF STUDY 1

CHAPTER 7 – DOWNWIND CALLS

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DOWNWIND CALLS

Unless otherwise instructed by ATC, pilots must report downwind when starting the downwind leg (i.e. turning downwind). This report should include the following information:

Callsign, position (turning downwind) and your intentions.

Intentions means the type of landing you require: a touch and go, a full stop landing or a stop and go landing.

XYA, turning downwind, touch and go

XYC, turning downwind, full stop

If pilots wish to conduct a non standard circuit such as a glide and flapless approach, they should advise the Tower with their downwind report. This advice will also alert other traffic.

Don't say "Parafield Tower" on your downwind call, you only need to say this on first contact.

If the radio is busy when the pilot is turning downwind they will have to wait to report. When the radio is clear the pilot reports their current position to the controller e.g. mid downwind, mid to late downwind, in their downwind report.

XYB, mid downwind, touch and go

XYD, early downwind, full stop

When you report, you will be cleared to land if.....

There is no traffic ahead of you in the circuit, that is, you are number one in the landing sequence.

There is no other traffic (such as inbound navigation flights) for you to sight and follow.

The Controller has no other reason to delay your landing.

Typical instructions are as follows:

XYB, mid downwind, touch and go

XYB, runway 03 right, cleared touch and go

Runway 03 right, cleared touch and go, XYB

If the Controller does not give you a clearance to land, because there are other aircraft in the circuit, ATC will probably issue a sequencing instruction based on your position in the circuit. In sequencing aircraft, ATC will indicate the position of the preceding aircraft by reference to a leg of the circuit or as a clock bearing, and describe it either as a specific type (e.g. a Cessna) or in general terms. (E.g. a twin)

Sequence numbers specify the landing order of an aircraft with respect to any preceding aircraft.

For example the Controller may say:

- | | | |
|----|---|---------------------|
| 1. | Your call sign | "Tango Golf Tango", |
| 2. | Your number in the landing sequence | "Number two", |
| 3. | What kind of aircraft you are following | "Follow a Cessna", |
| 4. | The position of the preceding aircraft | "Late downwind". |

Other examples:

YTC number 2, follow the Cessna just turning base
 YTC following a Grob about to turn base
 YTC number 3, following a Tobago joining a high base
 YTC follow the Cessna short final
 YTC follow the Katana turning final in your 11 o'clock
 YTC follow the Cessna in your 12 o'clock"

The instruction 'follow' requires you to sight the preceding aircraft, and regulate your speed and approach path to achieve separation. If you cannot see and identify the preceding aircraft, you must advise the tower, by saying "Negative contact"

The controller may not give a sequence number or a follow instruction, but may ask you to continue approach (If the runway is currently occupied) and/or may ask you to report on base or turning final or somewhere else in the circuit.

NB:

On downwind on the non duty runway (e.g. crosswind circuit training) include the runway in the downwind call.

XYB, downwind 26 left, touch and go

If pilots are doing a low level circuit pilots should include this information in the downwind call.

XYB, low level downwind, touch and go

LATE LANDING CLEARANCES

Sometimes a Controller might have to give you a late landing clearance. He might say.....

X-ray Yankee Foxtrot, continue approach, expect a late landing clearance.

If the reason for your late clearance is that there is an aircraft still on the runway, the Controller will tell you what the aircraft is doing.

Tango Golf November, one rolling, cleared to land.

Tango Golf Alpha, one vacating, cleared touch and go.

If the landing clearance comes very late the Controller knows that you will be very busy as you approach the flare and landing. He might say

Whisky Zulu Alpha, no need to acknowledge, cleared touch and go.

Tango Golf Tango, do not acknowledge, cleared touch and go

DO NOT ACKNOWLEDGE! DON'T SAY ANYTHING!

This is the only time that you do not need to acknowledge a call specifically directed at your aircraft.

NO LANDING CLEARANCE OR INSTRUCTIONS GIVEN?

You may be on base or final and the runway is clear. You have waited for a landing clearance but the Controller has said nothing! What should you do?

Controllers are very busy people. Maybe he/she is trying to sight another aircraft, or they maybe on the telephone.

Controllers get tired like everyone else, though it is very rare, he/she may have forgotten you!

If you have heard no transmissions to other aircraft either, your radio may be suspect.

If the Controller does not seem busy, you might try reminding him/her.

Tango Golf Mike, final.

X-Ray Yankee Charlie confirm we are cleared to land.

**** Do not remind the controller if the runway is still occupied ****

Do not land if you do not have a clearance, except in an emergency. Conduct a go-round, and when you are at a safe position in the circuit, try the radio again. If there is no response, transmit 'blind' and follow the Controller's light signals.

CALCULATING THE CROSSWIND COMPONENT ON THE RUNWAY

When you listen to the ATIS, often the wind is not blowing directly down the runway. It is important for you to be able to calculate the amount of wind that is blowing across the runway. This is called the crosswind component.

There is a very easy way to work this out. Firstly you must work out how many degrees difference there is between the actual wind direction, and the runway direction. Then do this easy calculation.

Let us use runway 26 as an example.

Runway direction	Wind direction	Difference in degrees between wind and runway	Amount of total wind which is crosswind
26	280°/ 20kts.	20°	$1/3 = 7\text{kts.}$
26	290°/ 20kts.	30°	$1/2 = 10\text{kts.}$
26	305°/ 20kts.	45°	$3/4 = 15\text{kts.}$
26	320°/ 20kts.	60°	$9/10 = 18\text{kts.}$

Show your instructor that you can think for yourself! You should know the crosswind component for every takeoff and landing.

It is also important to look at the windsock. Learn to read the wind speed by looking at the angle the sock is blowing out into the wind. Remember, all of the small airfields you will be using during your navigation training will not have any ATIS.

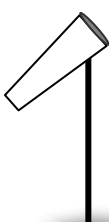
We can estimate wind speed from the windsock by looking at the angle. About 30° angle equals about 10kts of wind.



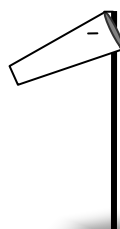
< 5 kts



5 – 10 kts



15 kts



20 kts



> 25 kts

Remember, the maximum crosswind allowed for the Grob is 20 knots, and the maximum allowed for the TB 10 is 25 knots.

However, you will not have the skill to fly in such a strong crosswind, until you have done quite a large amount of your training.

READ BACKS

You are not required to read back a follow or sequence number, just acknowledge the controller's call with your call sign, but only if you sight the traffic.

If you cannot see the traffic the controller mentions, or if you lose sight of the traffic the controller has mentioned, tell him/her

YTC, negative contact

The Controller may give you more information about the position of the traffic to help you or ask you to report once you have the traffic in sight.

Once you sight the traffic tell the controller:

YTC, traffic in sight

If you are asked at any time to report base or report turning final for example, you can acknowledge that you will do this by using the radio telephony word Wilco or just your callsign.

Here are some examples of read-backs that you may hear at various times in the circuit. You should know how and what to read-back, Notice that the pilot does not always read back all of the information.

Tango Golf Mike, downwind, full stop

Tango Golf Mike, cleared to land

Cleared to land, Tango Golf Mike

Tango Golf Mike, downwind touch and go

Tango Golf Mike, number 3, follow the Cessna turning base

Tango Golf Mike

Tango Golf Mike, downwind, request stop and go

Tango Golf Mike, cleared stop and go

Cleared stop and go, Tango Golf Mike

There is a comprehensive guide to read backs and a summary of the correct radio calls in the last chapter but in summary you are required to read-back any:

Altitude, heading, direction of turn and any speed instructions. Any clearance or instruction to hold short of, enter, take-off from, cross, taxi, backtrack, wait, conditional line up on, or land on any runway. The assigned runway, QNH directed to a specific aircraft, SSR codes and radio frequency instructions.

Any Airways clearance should be readback in full and in the order given.

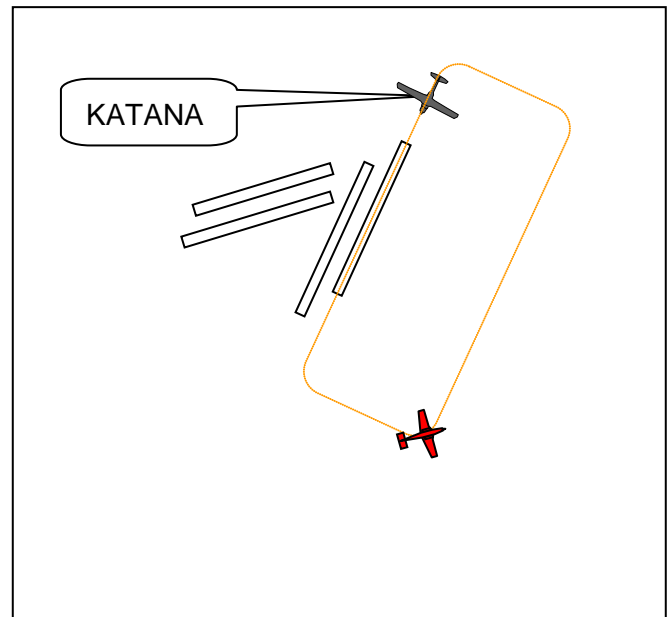
DOWNWIND CALLS LISTENING EXERCISE CTS 38 (2015)

Listen to the recording and then write down your read back in your listening workbook.

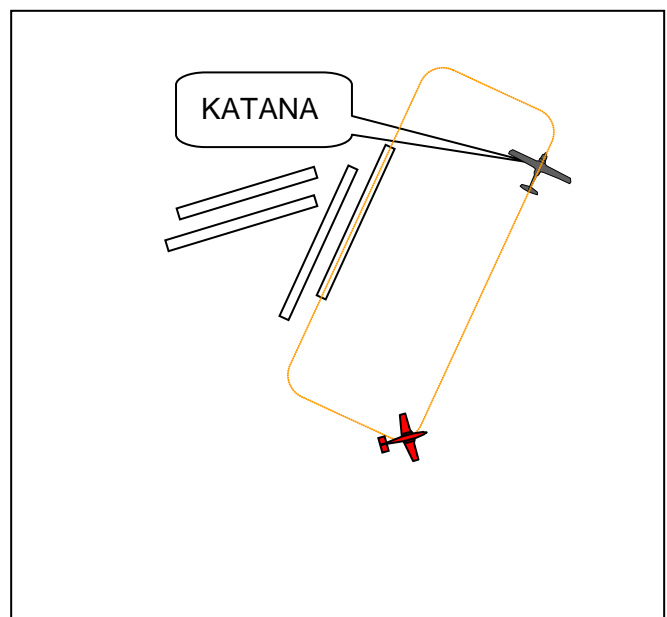
Check your answers when you have finished and listen again to any you didn't get right.

DOWNWIND CALLS LISTENING EXERCISE: CTS 38 (2015)**FOLLOW INSTRUCTIONS**

1. INR is downwind, full stop.
INR, follow the Katana on final.
INR.



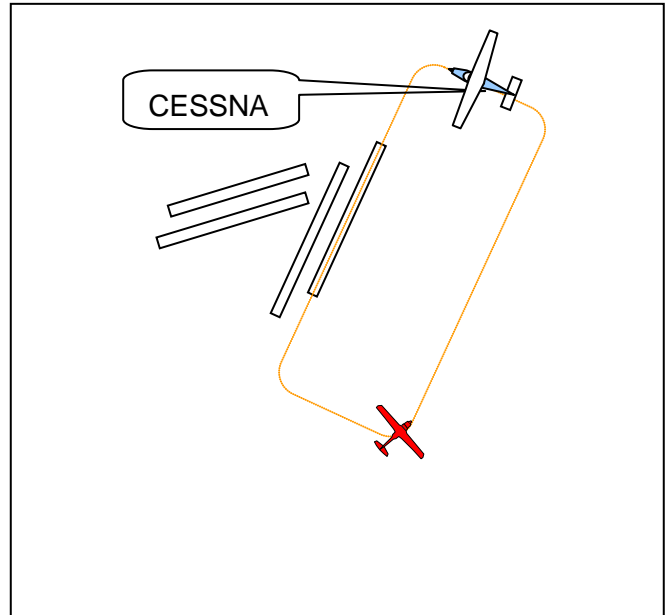
2. INR is downwind, for touch and go
INR, follow the Katana on late downwind.
INR.



3. HUU is downwind for touch and go.

HUU, follow the Cessna on base.

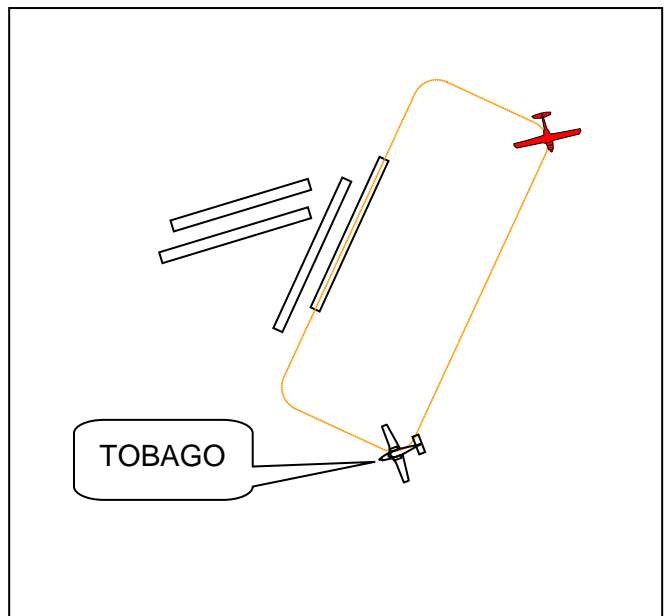
HUU.



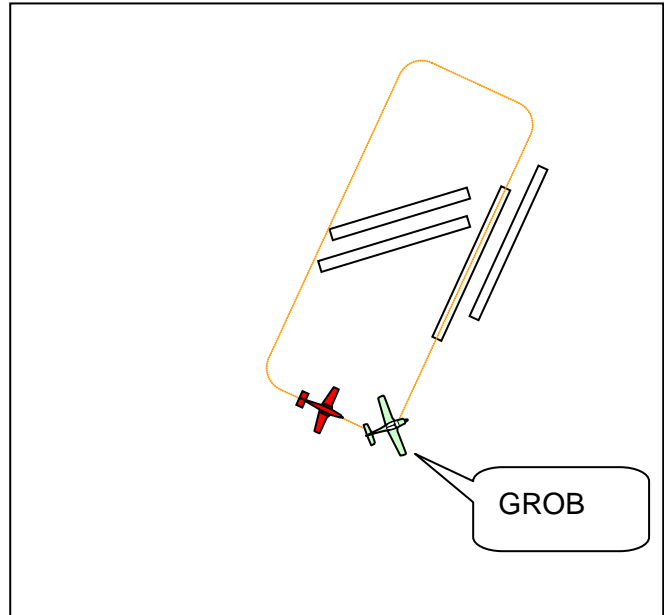
4. HUU is downwind for touch and go.

HUU, follow the Tobago turning base.

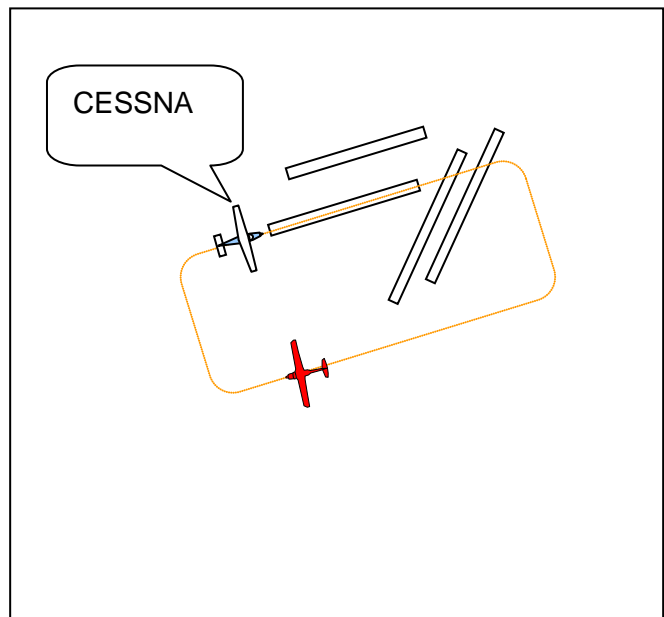
HUU.



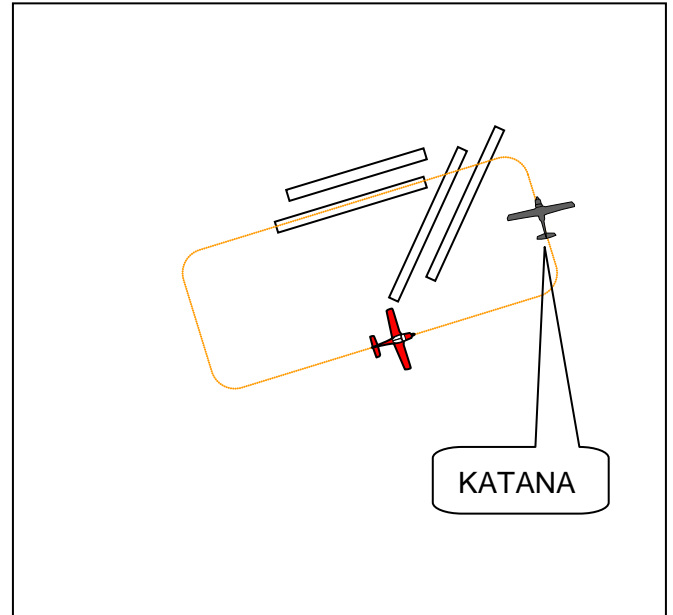
5. YTN, mid base 03 left, full stop.
YTN, follow the Grob turning final.
YTN.



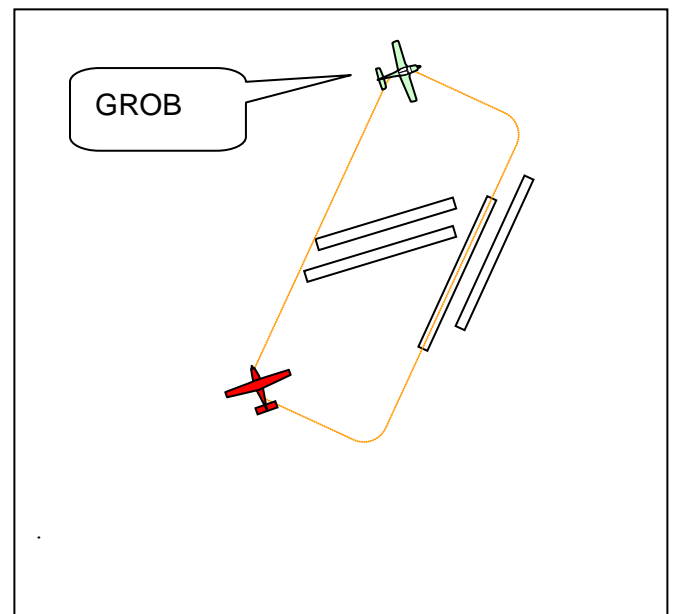
6. HUU late downwind, for touch and go.
HUU, following a Cessna short final.
HUU.



7. TGX, downwind, touch and go.
 TGX, number 2, following a Katana on base.
 TGX.



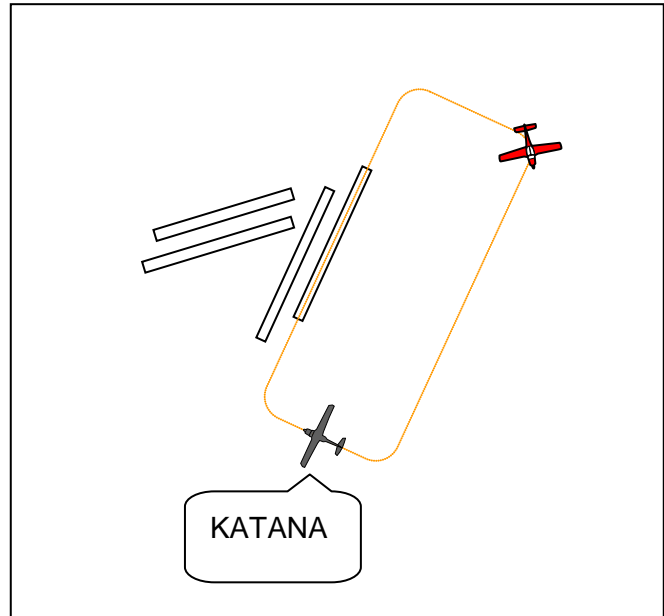
8. CYI downwind, full stop
 CYI, following a Grob turning base.
 CYI



9. TGX, downwind flapless touch and go.

TGX, following the Katana on base, that aircraft for a full stop.

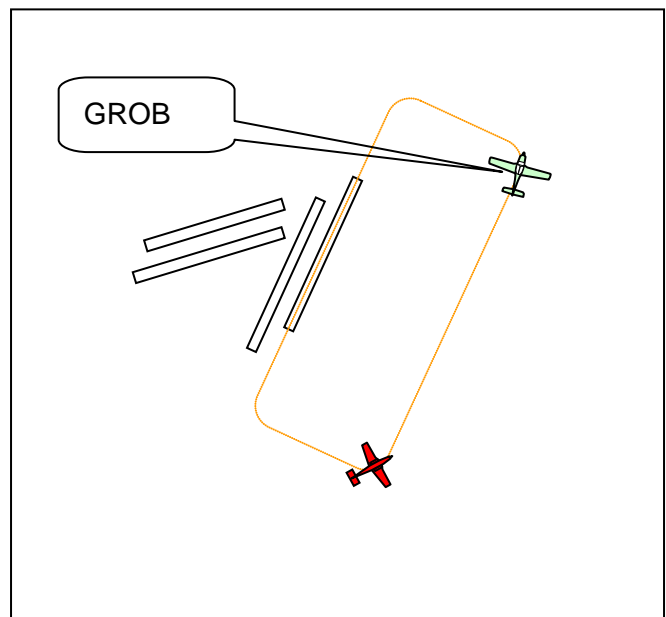
TGX.



10. YTB, downwind, touch and go.

YTB, following a Grob about to turn base.

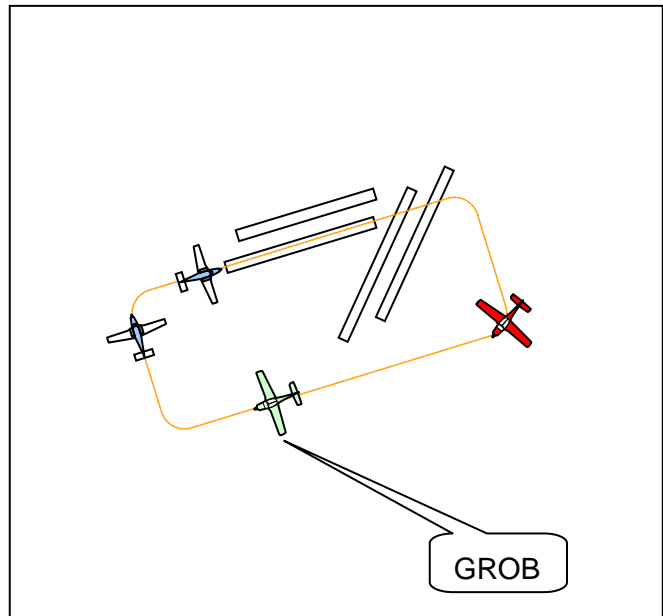
YTB



11. TGN, downwind, touch and go

TGN, number 4 follow the Tobago, correction the Grob mid to late downwind.

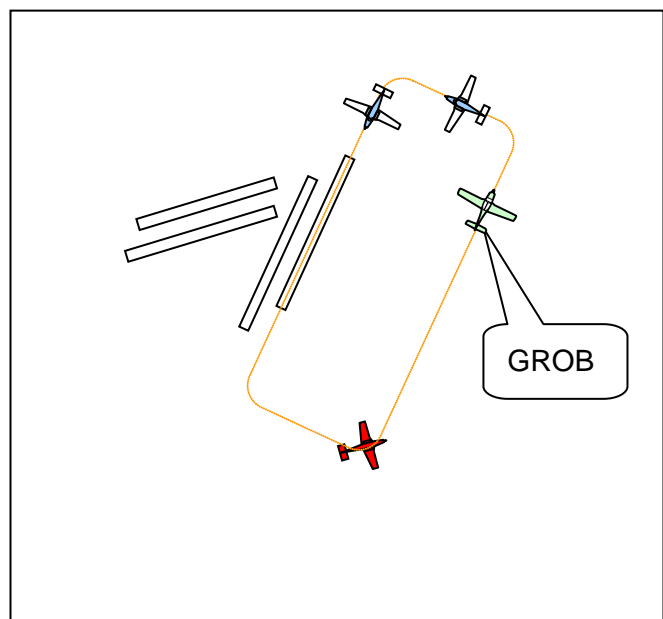
TGN.



12. YTX turning downwind for touch and go.

YTX number 4, follow the Grob late downwind.

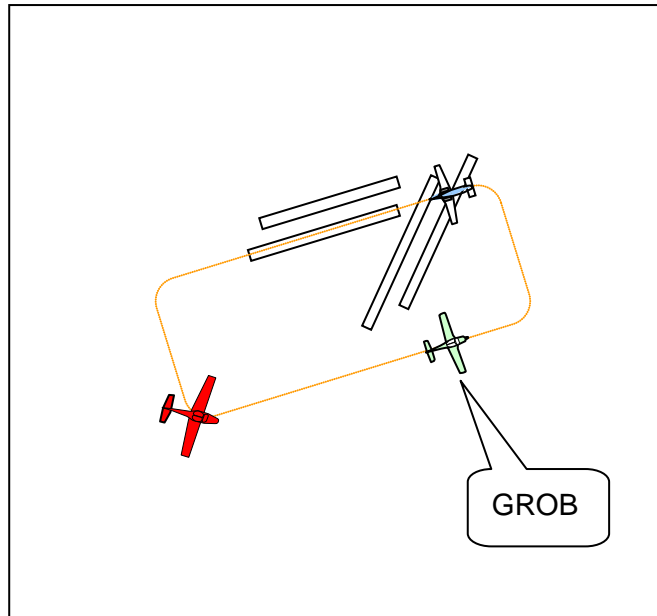
YTX.



13. TGN, downwind, touch and go.

TGN, number 3, follow the Grob mid to late downwind.

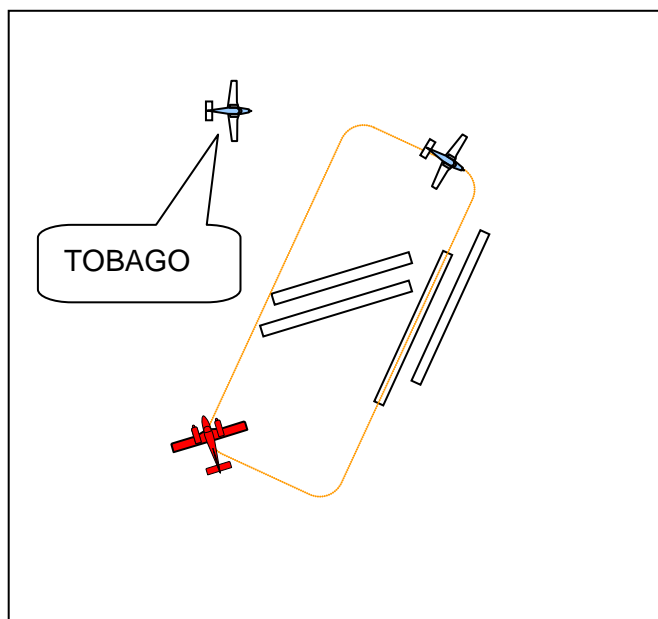
TGN.



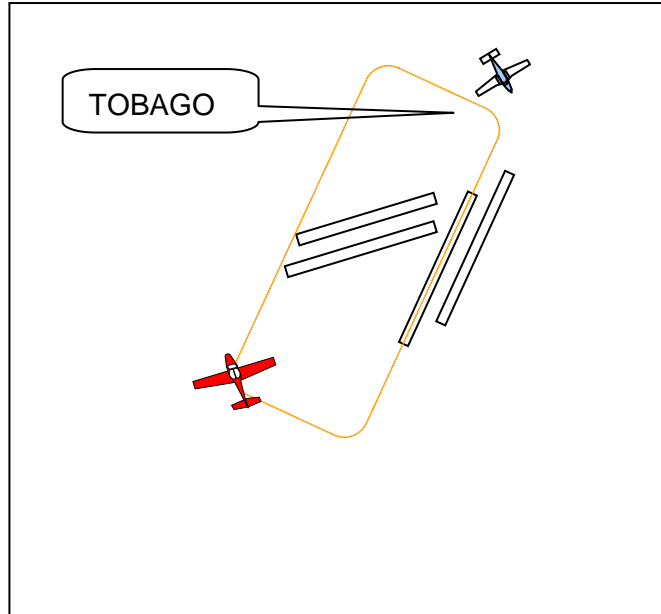
14. WZA, turning downwind, touch and go.

WZA, number 3, following a Tobago joining a high base.

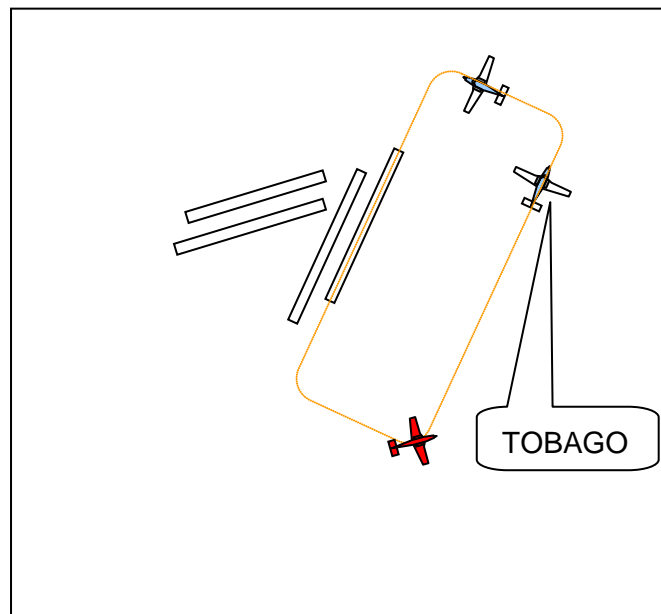
WZA.



15. TGX downwind , flapless, touch and go
 TGX, follow the Tobago turning a high final.
 TGX



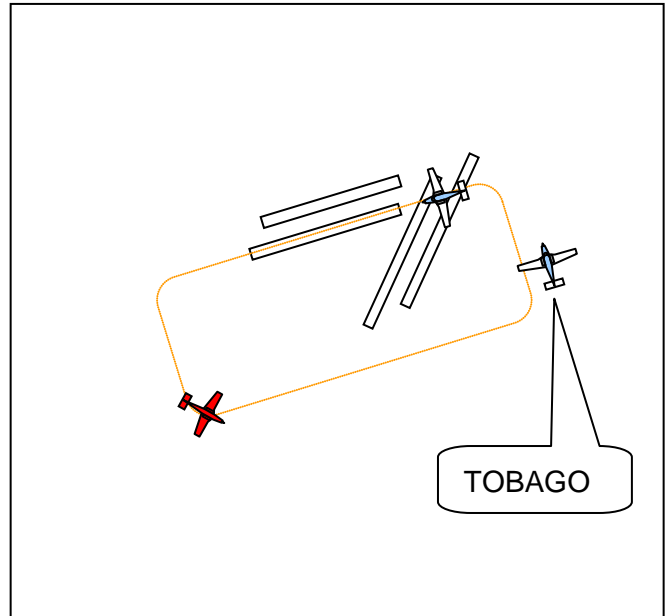
16. ~TB downwind, touch and go.
 YTB, number 3, follow the Tobago on a high late downwind.
 YTB



17. YTB, downwind, touch and go.

YTB, number 3, follow the Tobago on a high base.

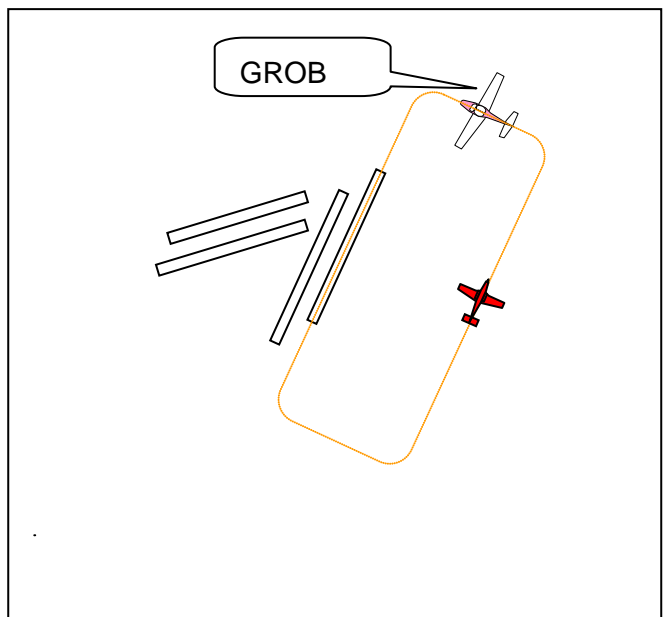
YTB



18. YTC mid downwind for touch and go.

YTC, follow the Grob mid base.

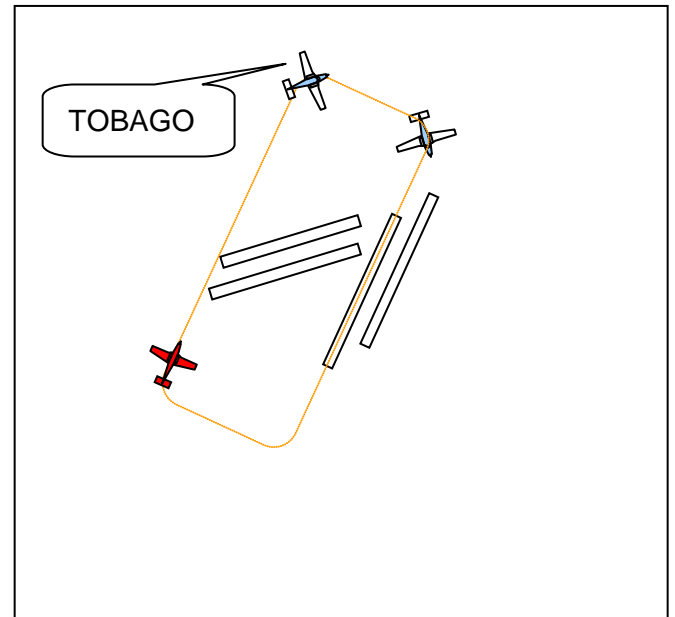
YTC



19. YTX, downwind, touch and go flapless.

YTX, number 3, follow the Tobago turning base.

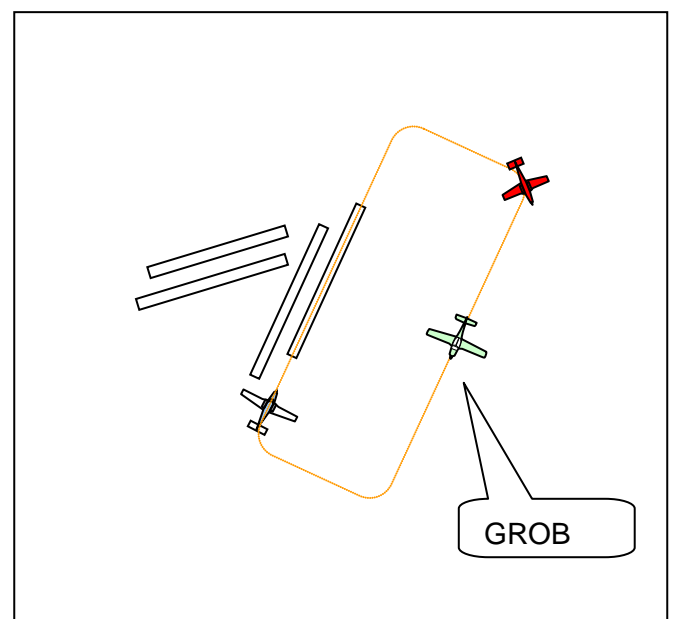
YTX



20. YTC, turning downwind, touch and go.

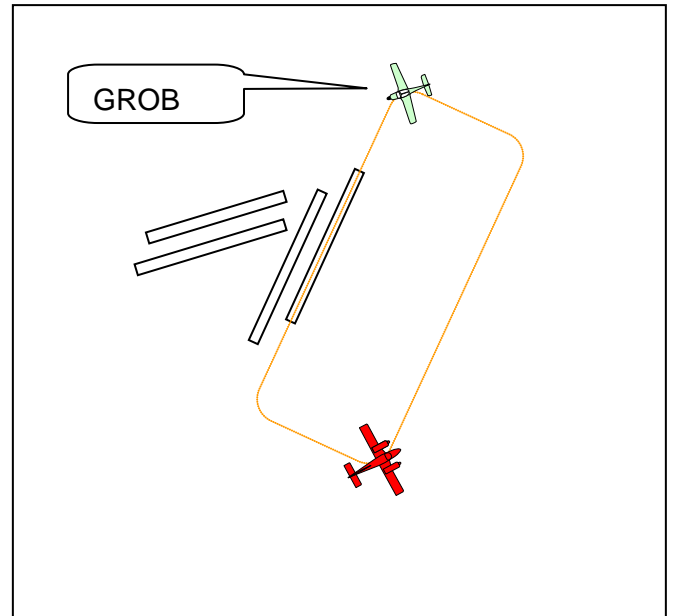
YTC, number 3, follow the Grob mid downwind.

YTC



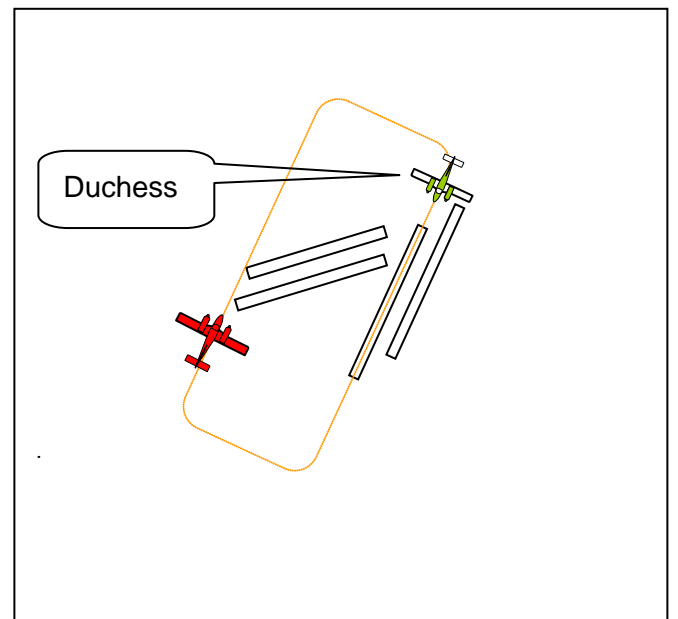
21. MZE, downwind, touch and go.

MZE following a Grob, turning final.
MZE.



22. MZE, downwind, touch and go.

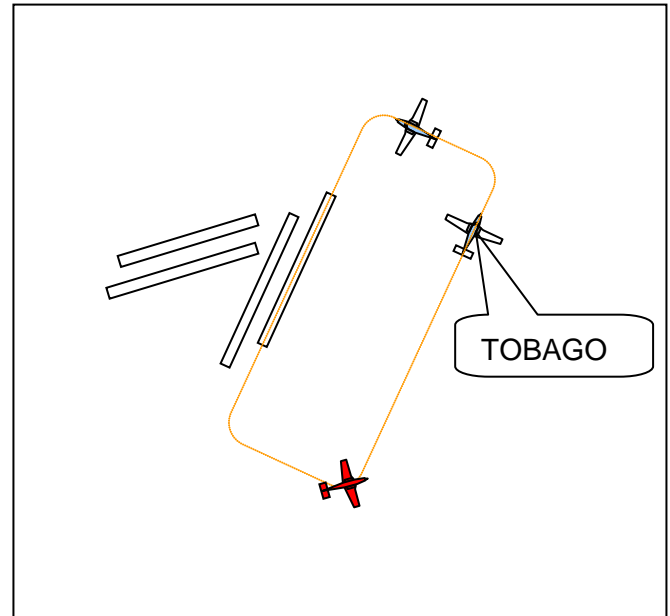
~ZE following a Duchess on final.
MZE.



23. MBB is downwind for touch and go.

MBB, number 3, follow the Grob late correction the Tobago late downwind.

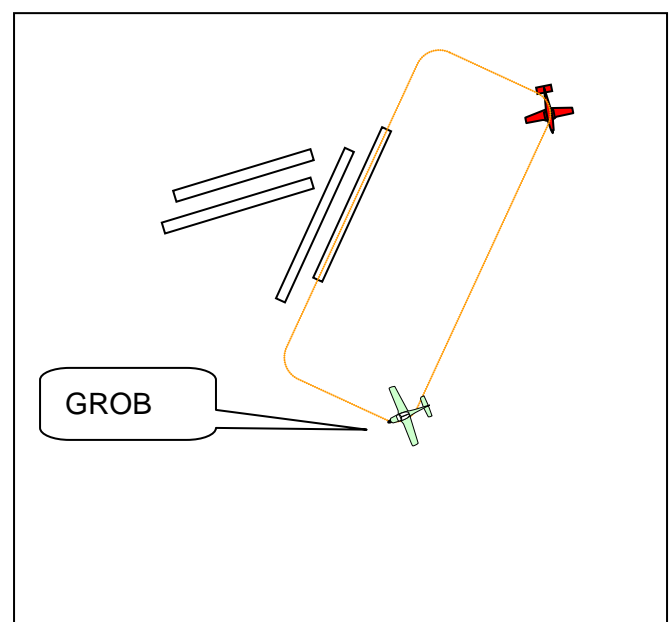
MBB



24. YTS, downwind for touch and go.

YTS, follow the Grob turning base. That aircraft for a full stop.

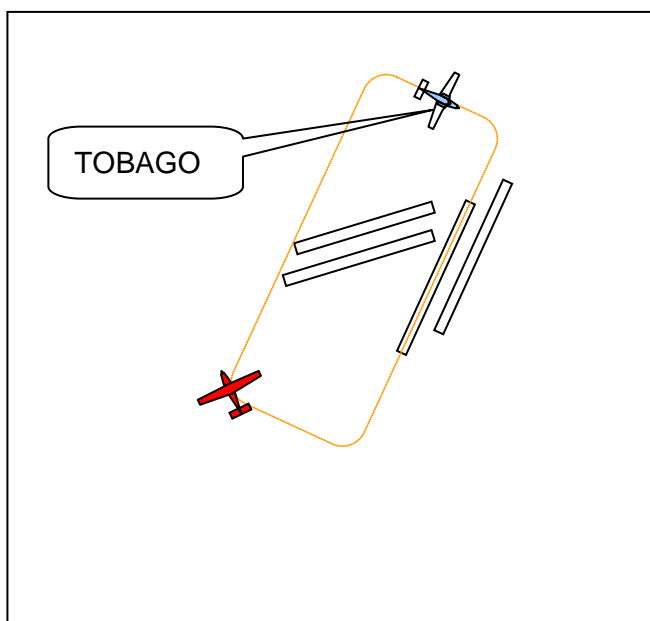
YTS



25. MBB is downwind for full stop.

MBB, follow the Tobago mid, mid base.

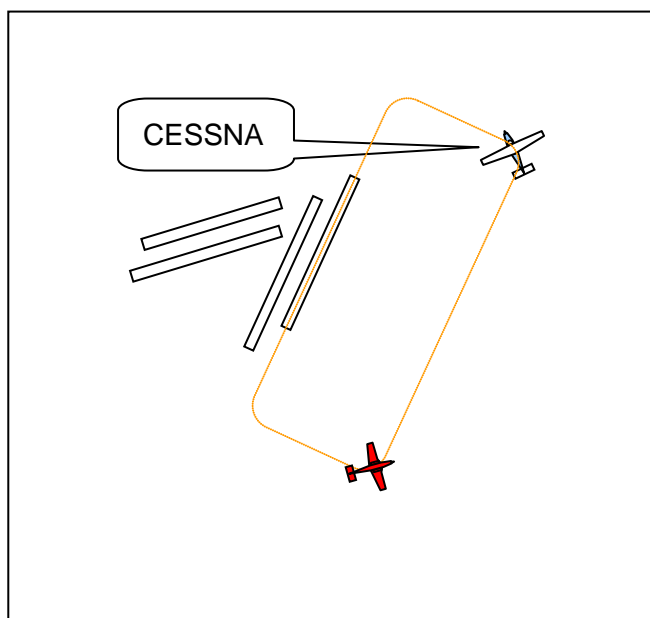
MBB.



26. YTE, downwind, touch and go

YTE, follow the Cessna turning base.

YTE



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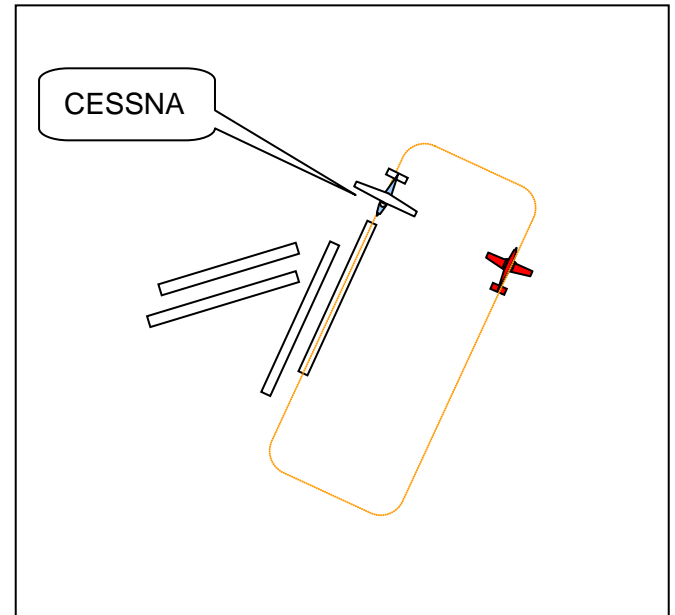


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27. YTE, late downwind, touch and go.

~TE, follow the Cessna short final.

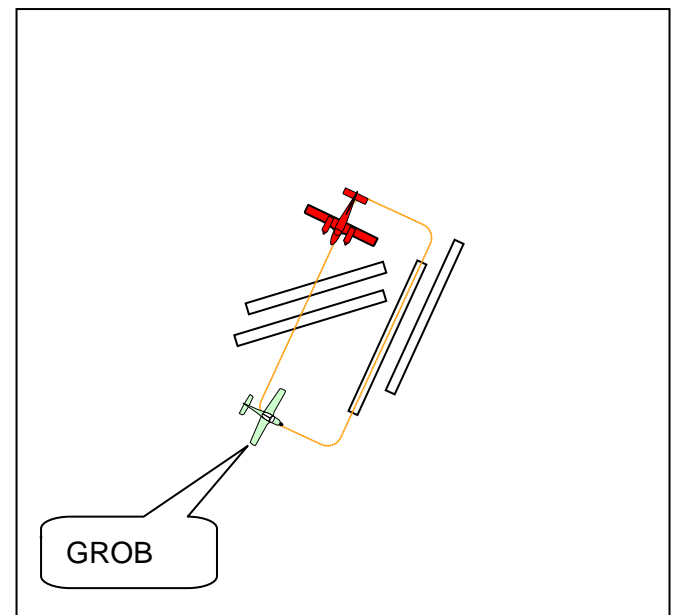
YTE



28. KTB, low level downwind, full stop.

~TB follow the Grob early base in your 12 o'clock.

KTB.



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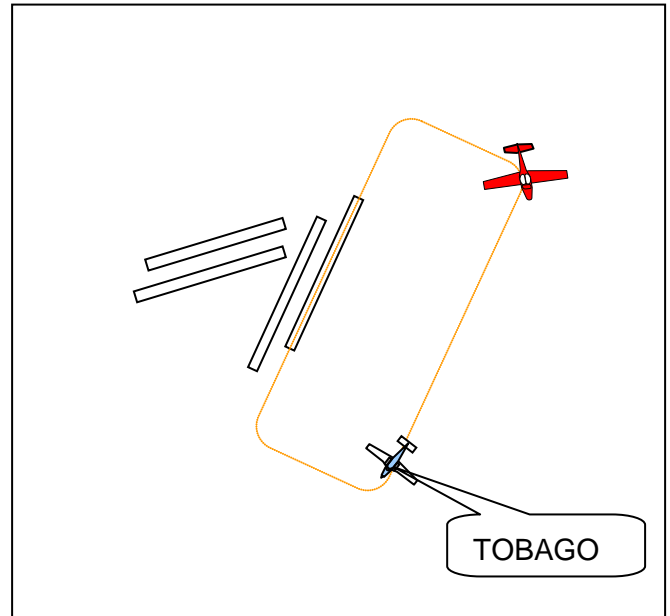


PRE-SOLO SELF STUDY 1

29. TGZ, downwind, full stop.

TGZ, follow the Tobago high late downwind is just turning base for glide approach.

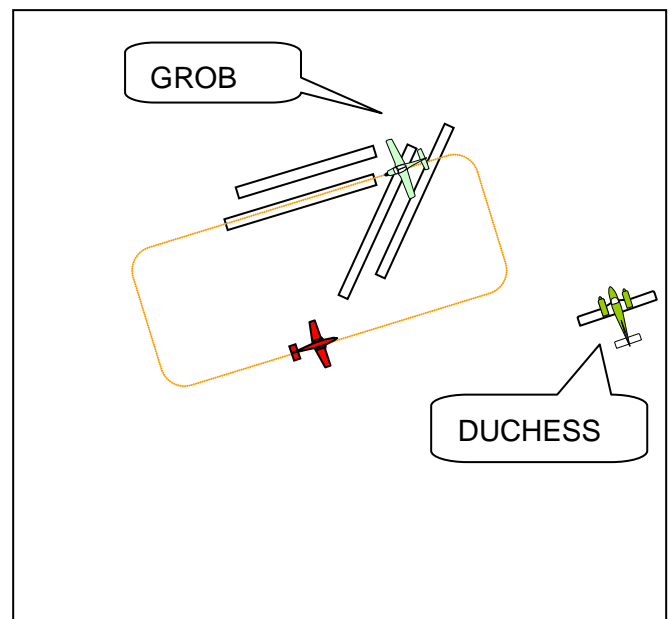
TGZ



30. CGR is downwind, touch and go.

CGR, follow the Grob on final and Duchess now about your 1 to 2 o'clock.

CGR

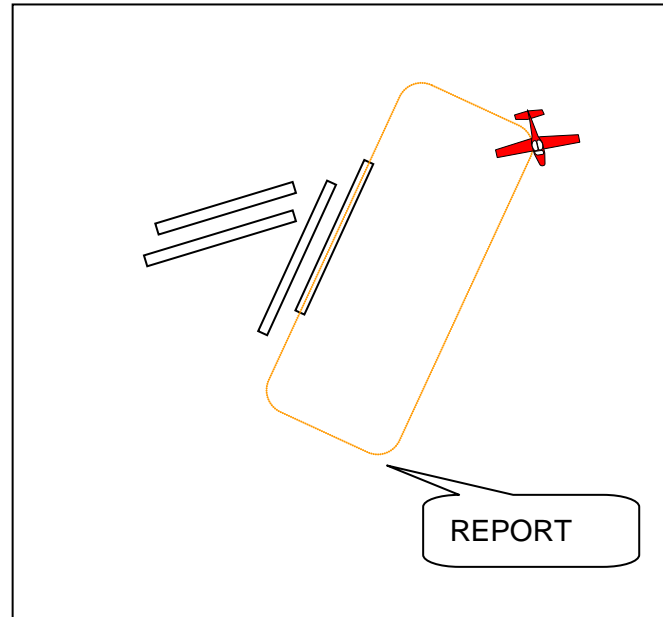


REPORT REQUESTS

31. TGX, downwind, touch and go.

TGX, report turning base.

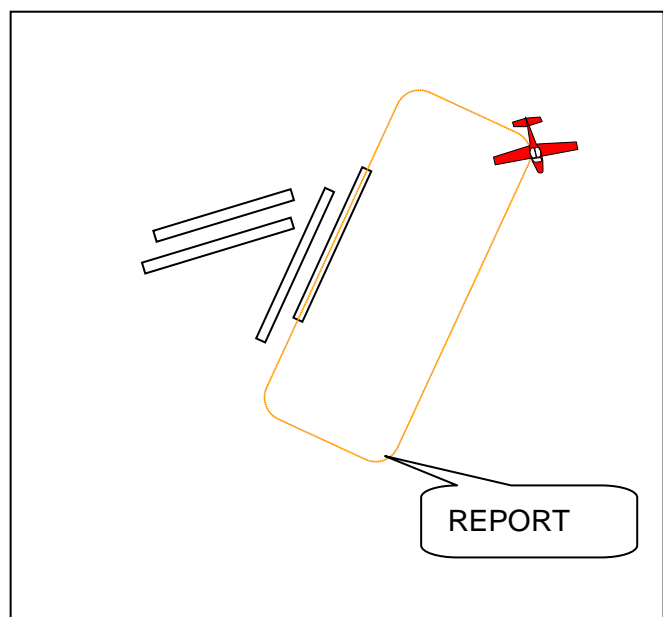
TGX, wilco



32. TGX, downwind for full stop

TGX, continue approach, report turning base.

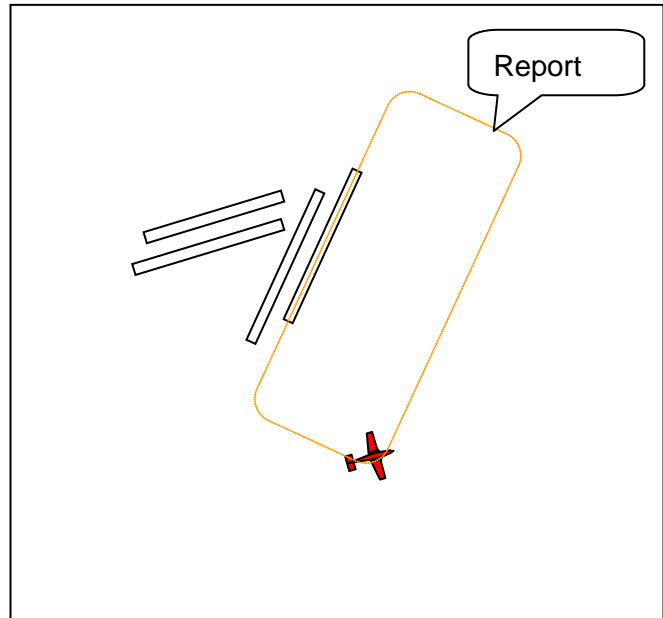
Continue approach, wilco, TGX.



33. YTN turning downwind touch and go.

YTN, report on base

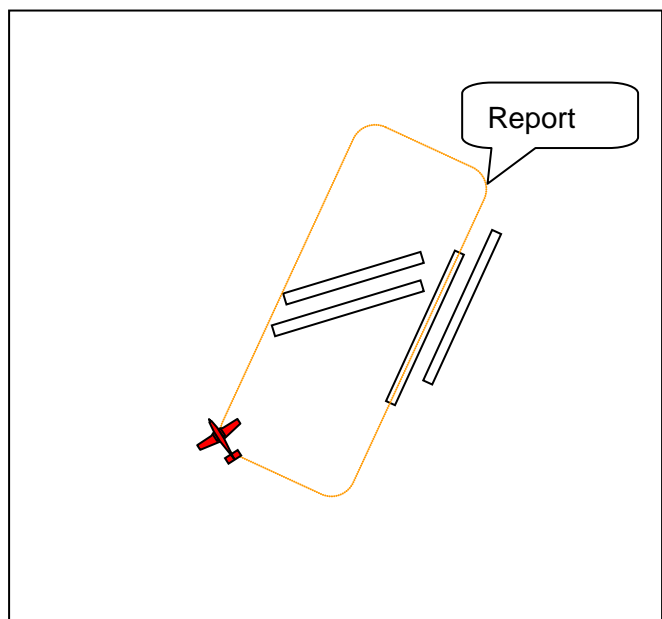
YTN, wilco



34. YTS turning downwind, touch err full stop.

YTS, report turning final

YTS, wilco



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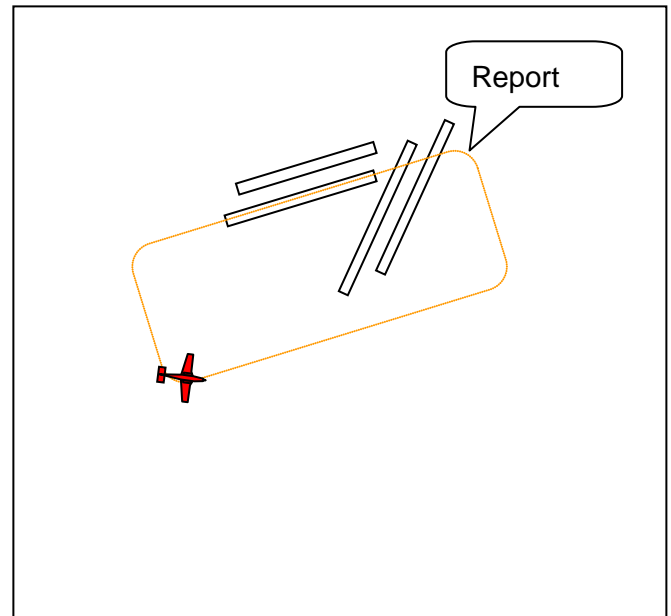


PRE-SOLO SELF STUDY 1

35. YTF turning downwind touch and go.

YTF, report turning final

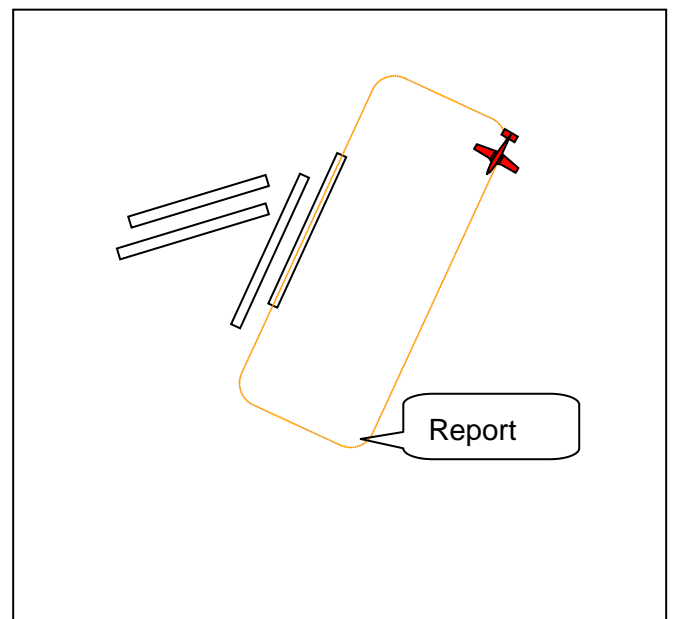
YTF, wilco



36. BEG downwind touch and go.

BEG, report turning base

BEG, wilco

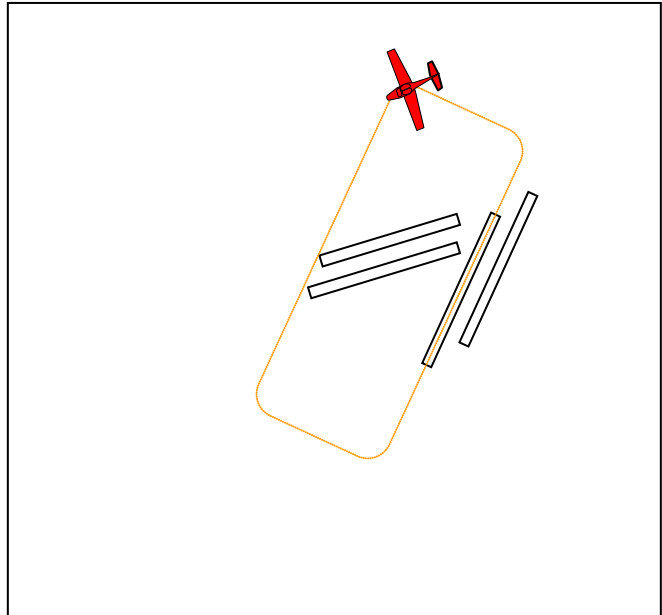


LANDING CLEARANCES

37. TGX, downwind, full stop.

TGX, 03 left, cleared to land.

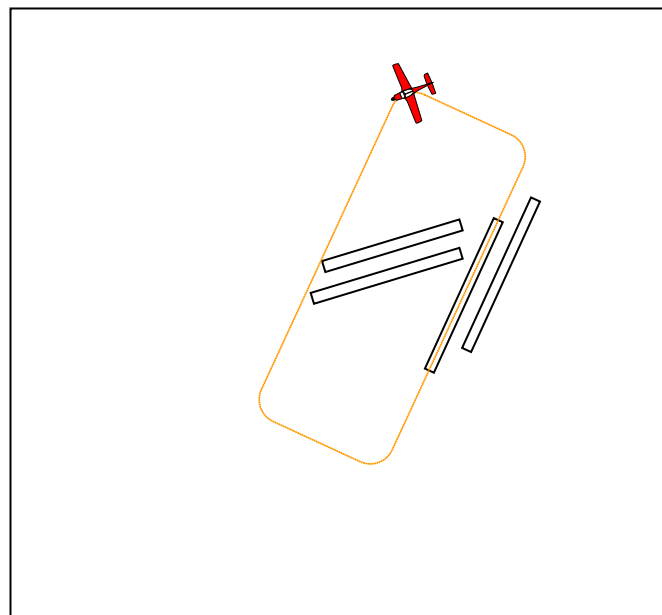
Runway 03 left, cleared to land, TGX



38. TGX, turning downwind, touch and go.

TGX, cleared touch and go.

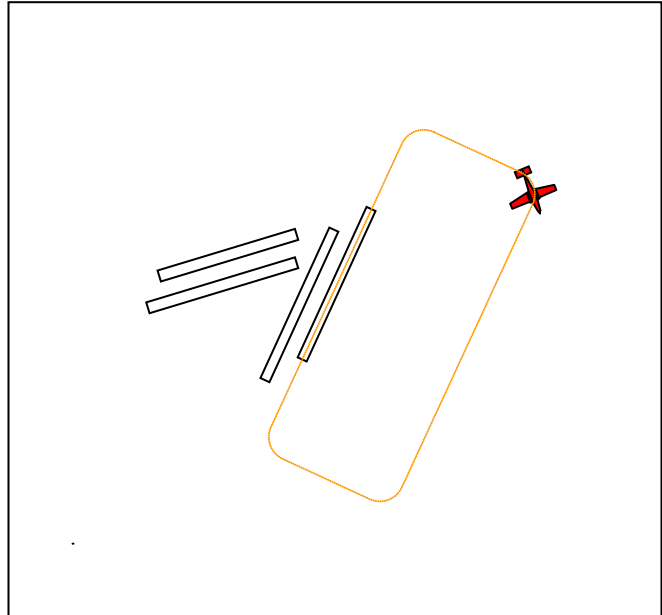
Cleared touch and go, TGX.



39. YTR is downwind for touch and go.

YTR runway right, clear touch and go.

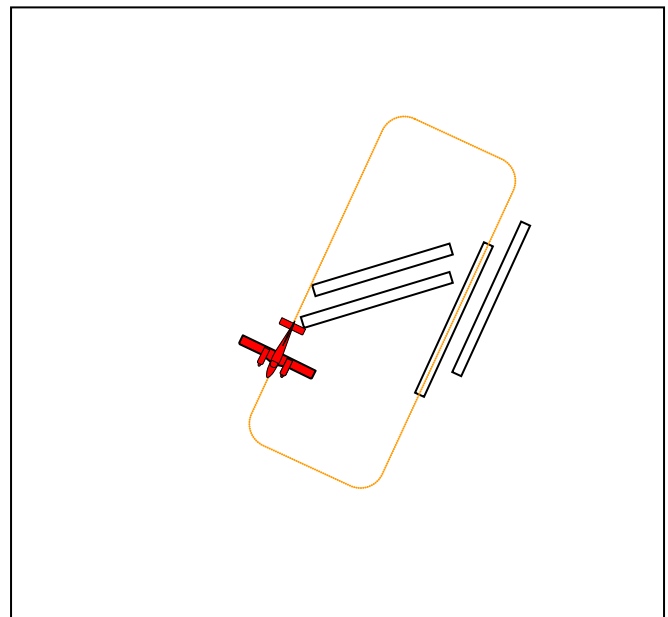
Runway right, cleared touch and go, YTR.



40. WZA, late downwind touch and go.

WZA, clear touch and go.

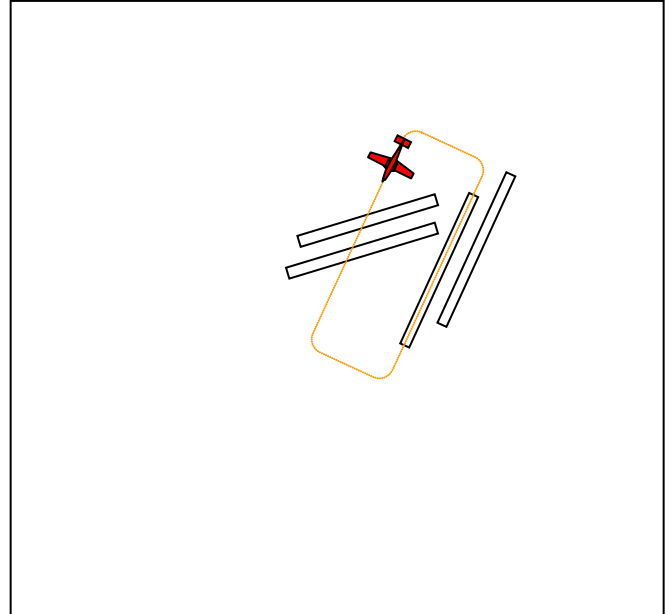
Cleared touch and go, WZA.



41. YTX downwind, low level for stop and go.

YTX, runway left, cleared stop and go.

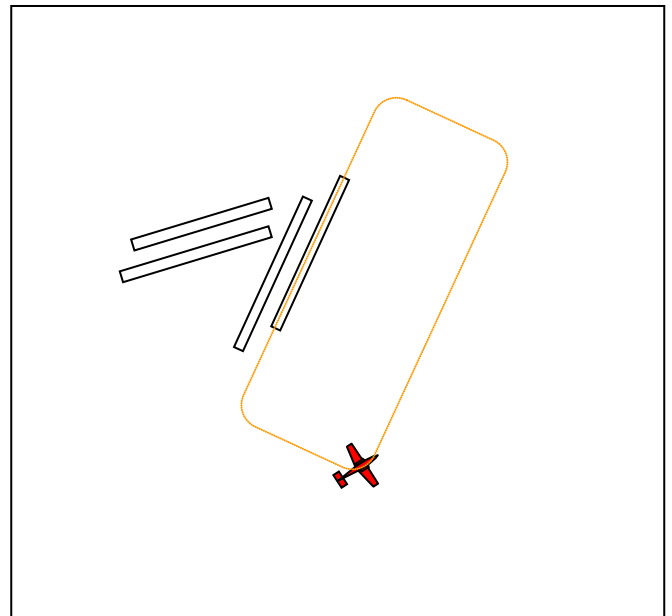
Runway left, cleared stop and go, YTX



42. YTS, downwind for stop and go.

YTS, runway 21 left, cleared stop and go.

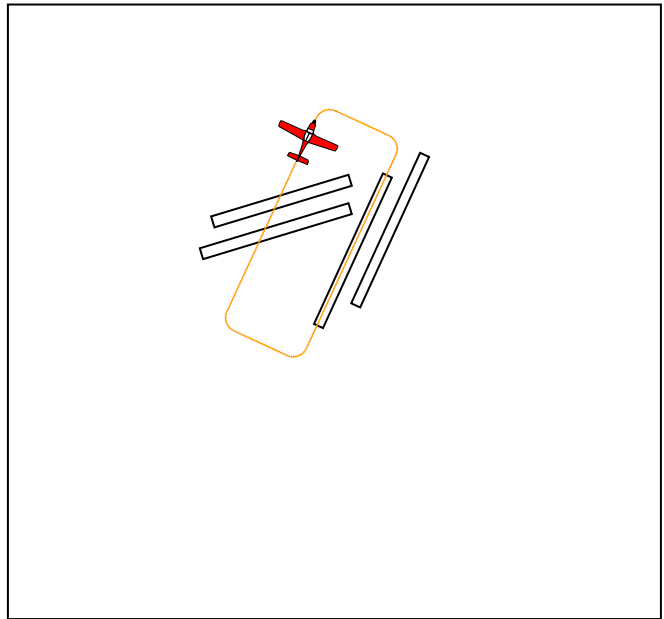
Runway 21 left, cleared stop and go, YTS.



43. TGZ low level downwind, touch and go.

TGZ , in fact that's late low level downwind, runway right, you're cleared touch and go.

Runway right, cleared touch and go, TGZ.

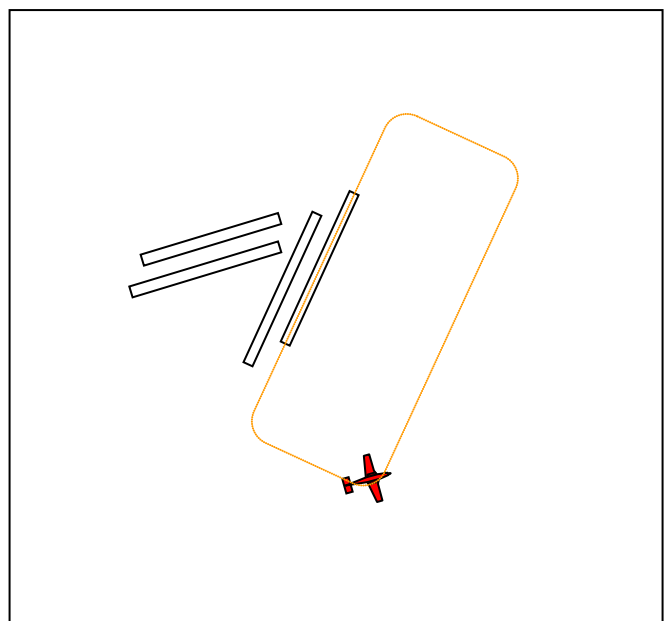


INSTRUCTIONS

44. YTN turning downwind touch and go.

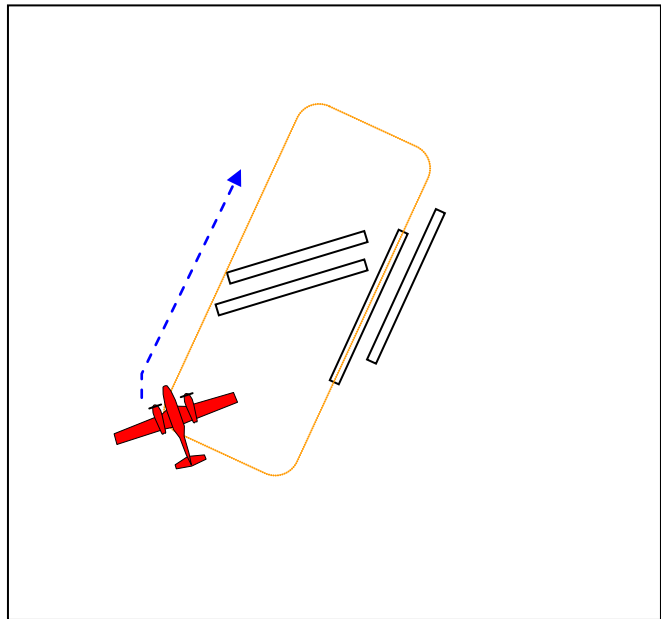
YTN, continue approach

Continue approach, YTN



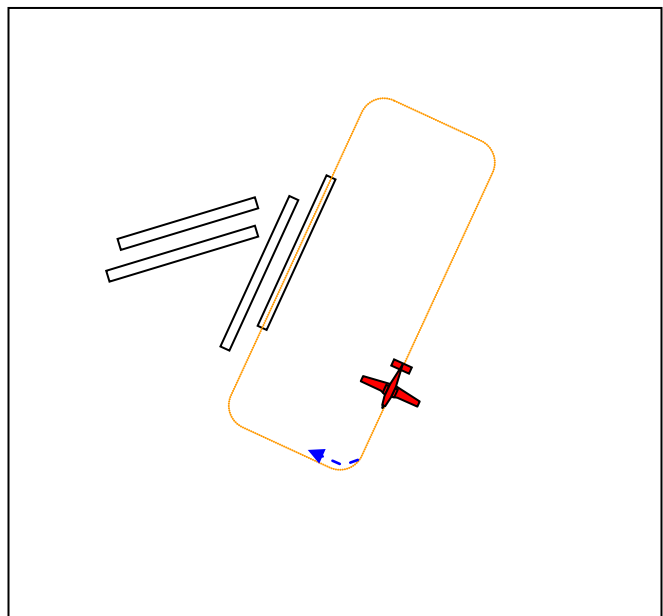
45. YBX downwind for the option

YBX, continue downwind, expect change of runway 03, shortly
Continue downwind, YTS



46. HQQ late downwind for 03R

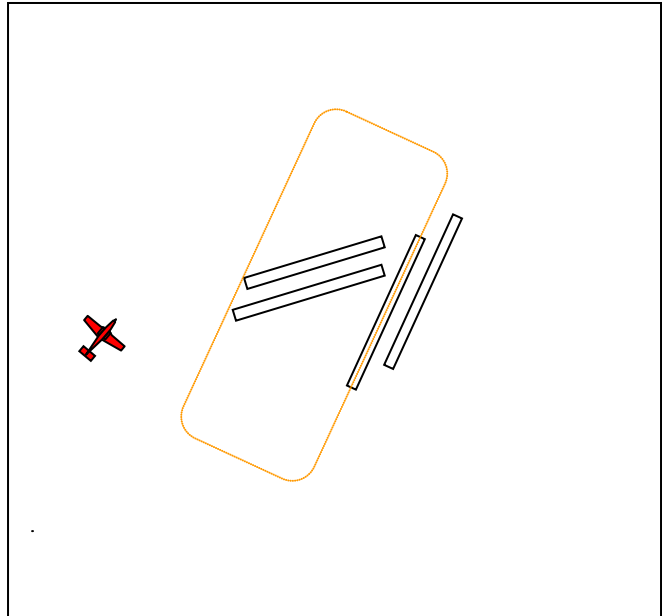
HQQ, turn base when ready and expect a landing clearance shortly.
Turn base when ready, HQQ



47. YTO approaching high downwind, 21 right.

YTO, maintain 1500

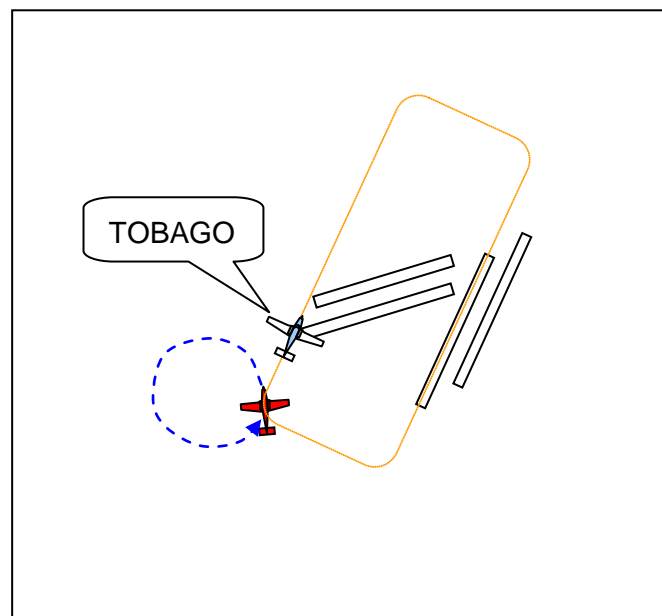
Maintain 1500, YTO



48. YTN, turning downwind, touch and go.

YTN, make 1 left orbit err and err then traffic to sight once you have completed the orbit is a Tobago that will be late downwind for 21 right.

One left hand orbit, wilco, YTN.



DOWNWIND CALLS 06 LISTENING EXERCISE

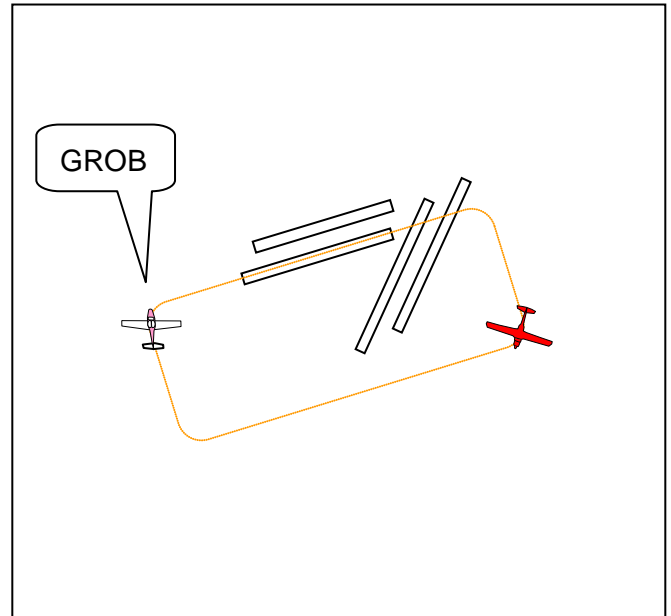
Further listening practice to downwind calls.

Listen to the recording and then write down your read back in your listening workbook.

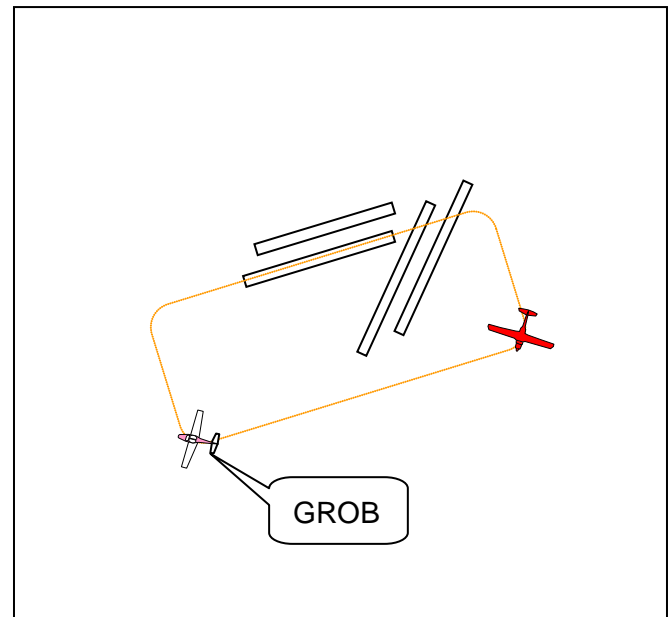
Check your answers when you have finished and listen again to any you didn't get right.

DOWNWIND CALLS 06 LISTENING EXERCISE (2015)**FOLLOW INSTRUCTIONS**

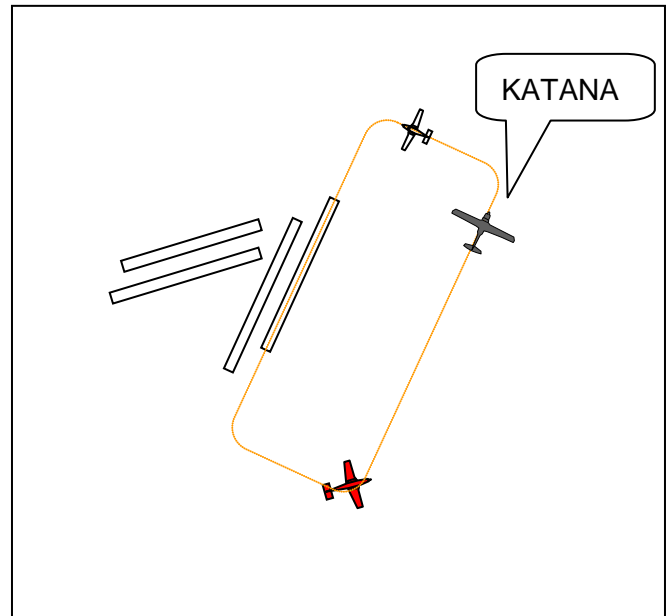
1. HXX, downwind, touch and go.
HXX, follow a Grob about to turn final
HXX



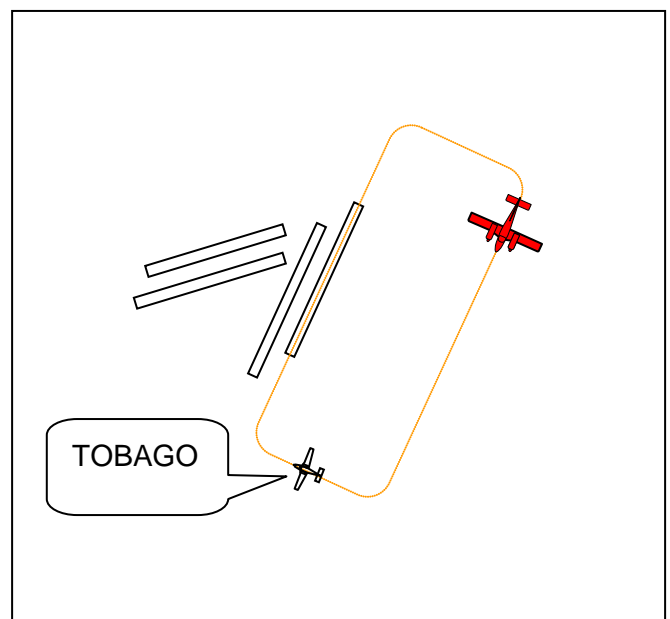
2. HXX, downwind, touch and go
HXX, follow the Grob turning base.
HXX



3. YTR, downwind, flapless, touch and go.
YTR, number 3, follow a Katana late downwind.
YTR



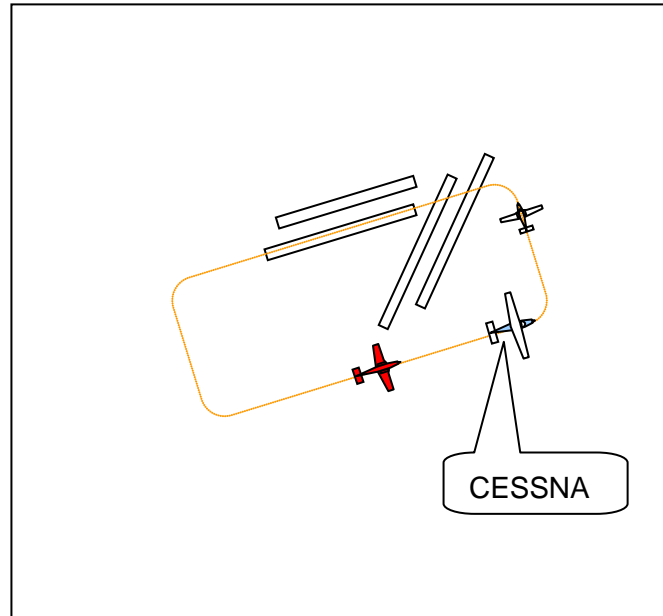
4. KTB, downwind for touch and go.
KTB follow a Tobago on base, that aircraft for a full stop.
KTB



5. YTS, mid-downwind, touch and go.

YTS, err, number 3, follow a Tobago, correction, follow a Cessna late downwind.

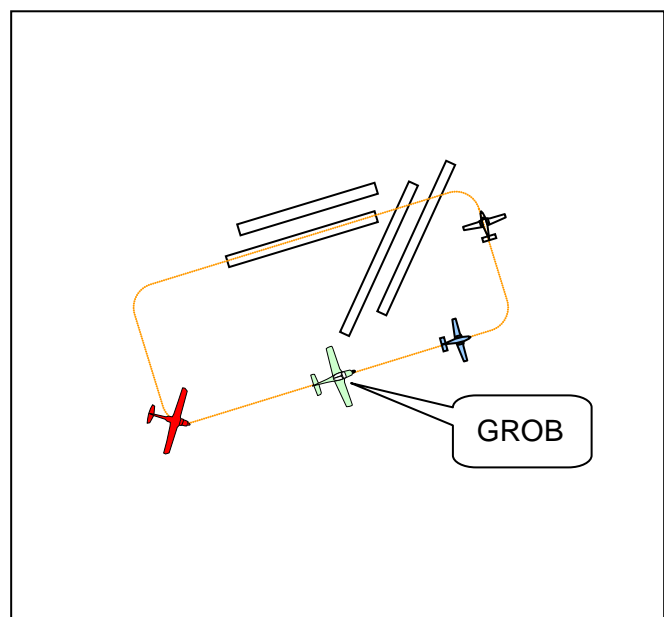
YTS



6. HXX, downwind touch and go.

HXX, number 4, follow a Grob mid downwind, that aircraft for a full stop.

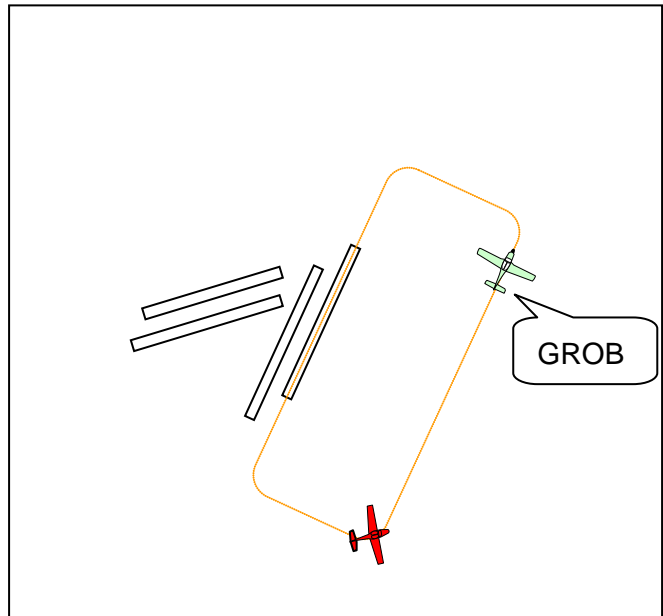
HXX



7. TGK, downwind, touch and go.

TGK, follow a Grob late downwind, that aircraft making a stop and go.

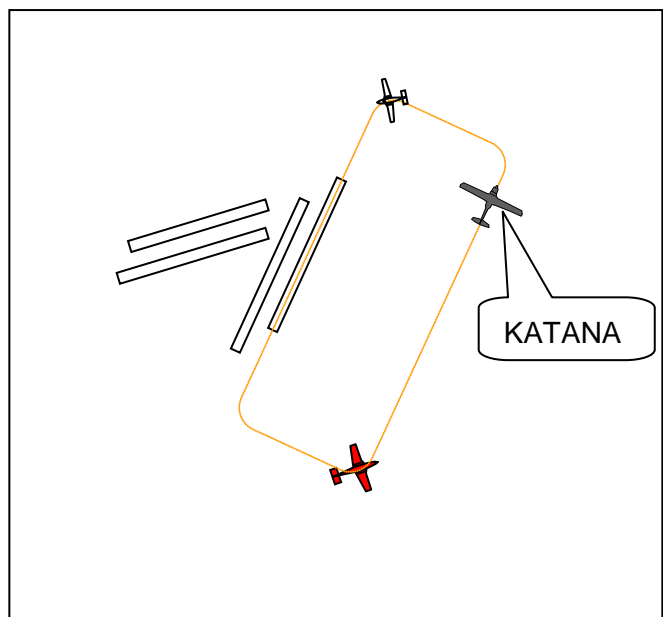
TGK



8. YTR, downwind, full stop.

YTR, number 3, follow the Katana late downwind

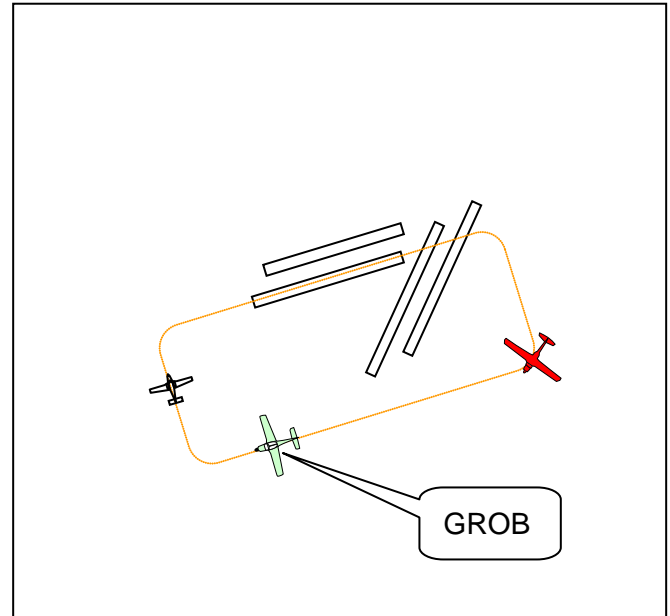
YTR



9. HXX, downwind, touch and go.

HXX, number 3, follow a Grob late downwind.

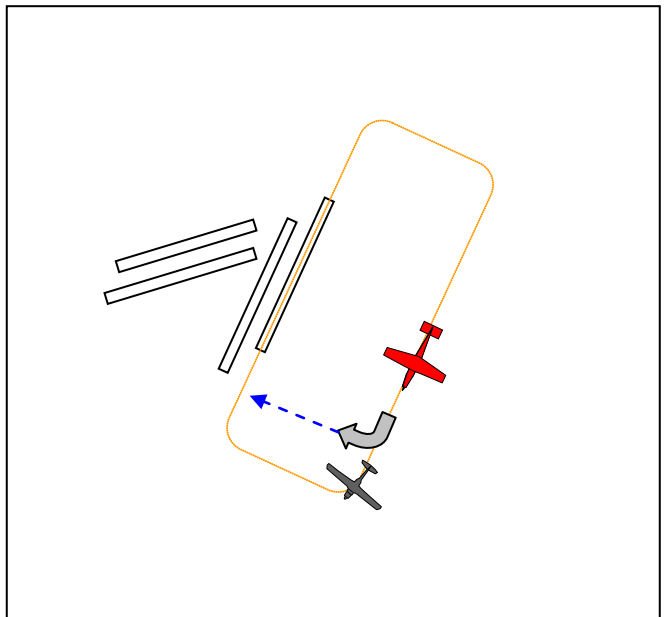
HXX



10. (LCY, mid to late downwind, touch and go)

LCY, you can turn base now, the Katana, the Diamond just turning base.

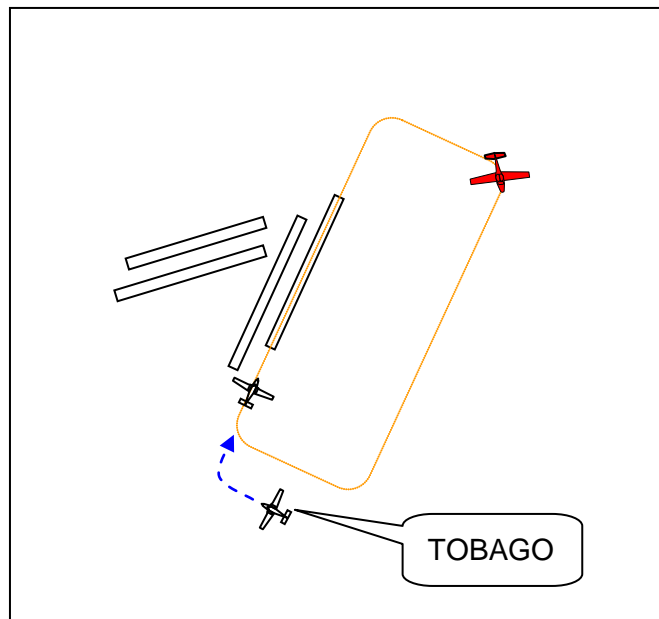
Turn base, LCY



11. TGE, downwind, touch and go

TGE, number 3, follow a Tobago on a fairly wide base.

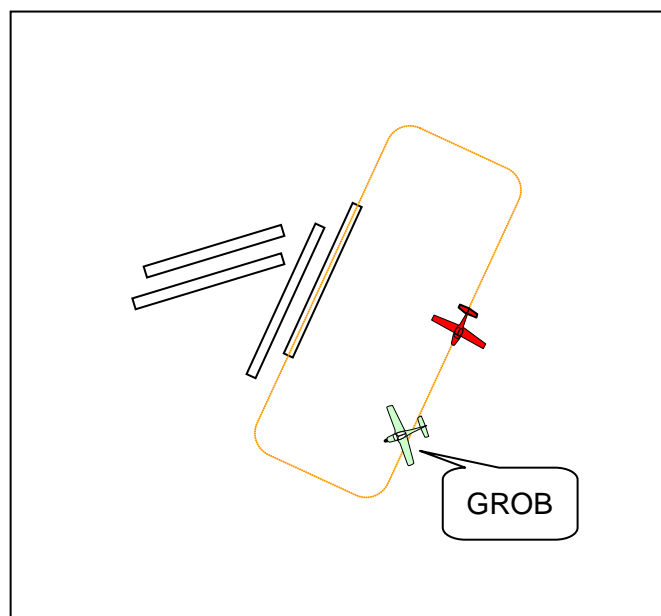
TGE.



12. TGT, mid downwind, touch and go.

TGT, follow the Grob turning on a close base for glide approach.

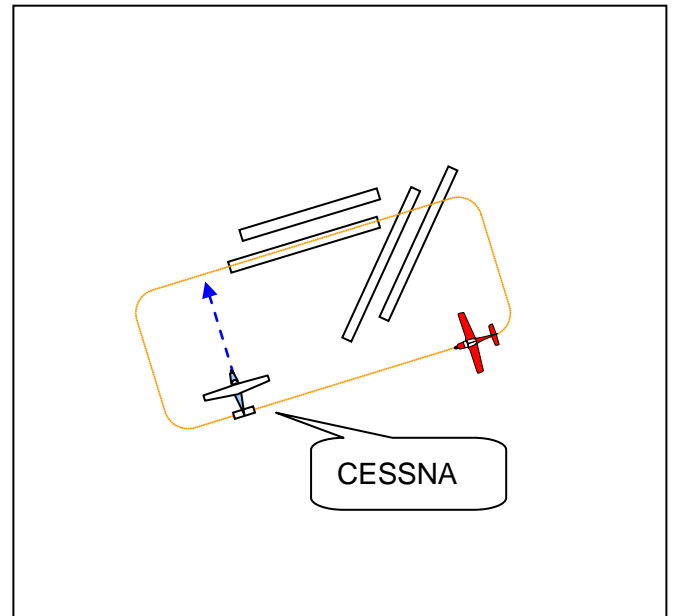
TGT



13. TGE, downwind touch and go

TGE, you'll be number 2, follow a Cessna on a close right base, in about your 12 o'clock high now.

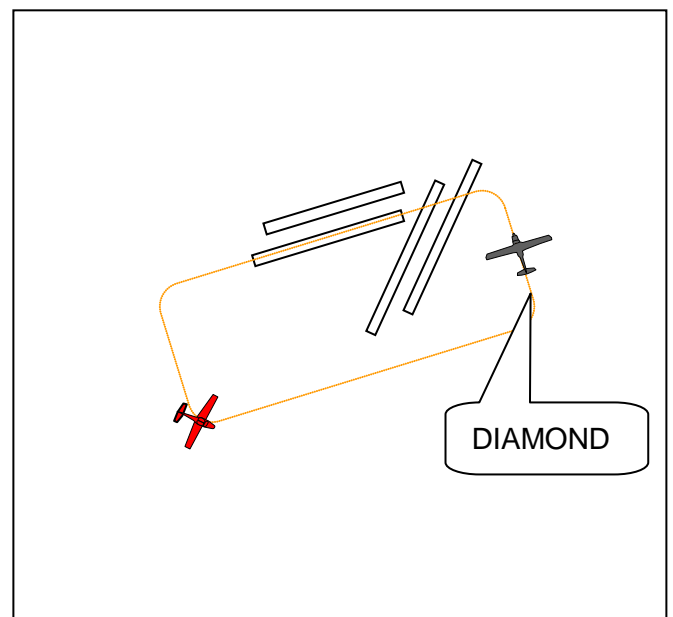
TGE.



14. TGP, downwind, touch and go

TGP, follow the Diamond mid base.

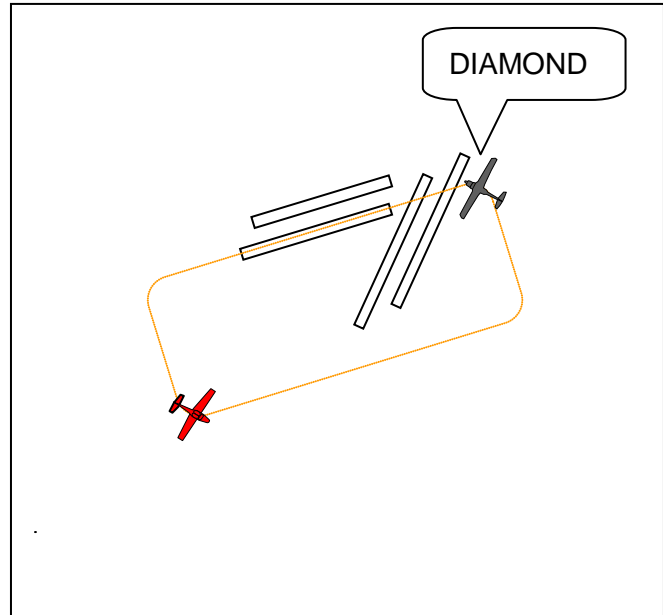
TGP



15. TGP, downwind, touch and go.

TGP, follow a Diamond turning final.

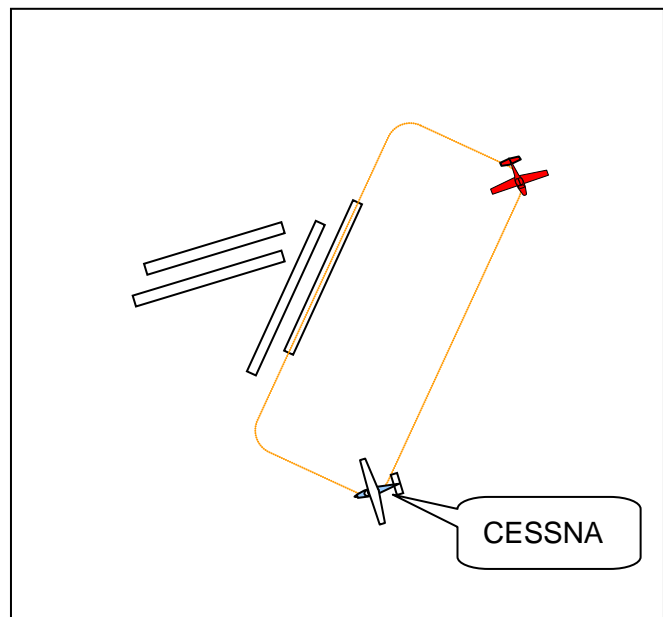
TGP



16. TGK, downwind, touch and go.

TGK, follow the Cessna turning base.

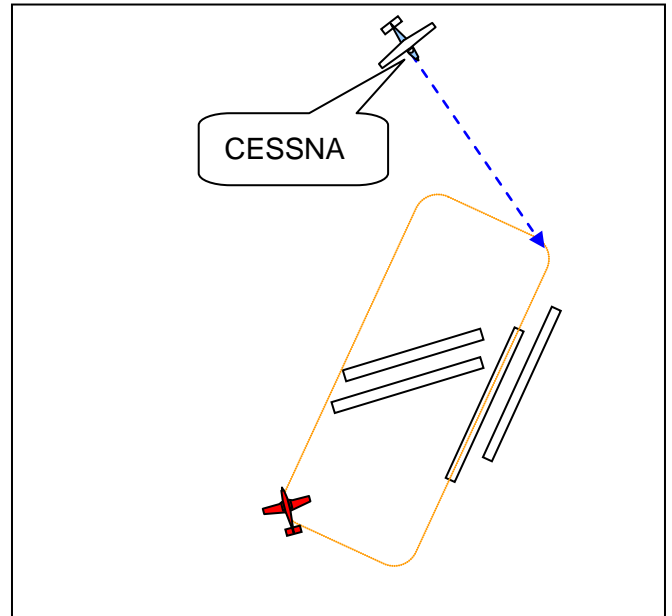
TGK



17. YTJ, downwind, full stop.

YTJ, number 2, follow a Cessna 182 joining on an oblique base.

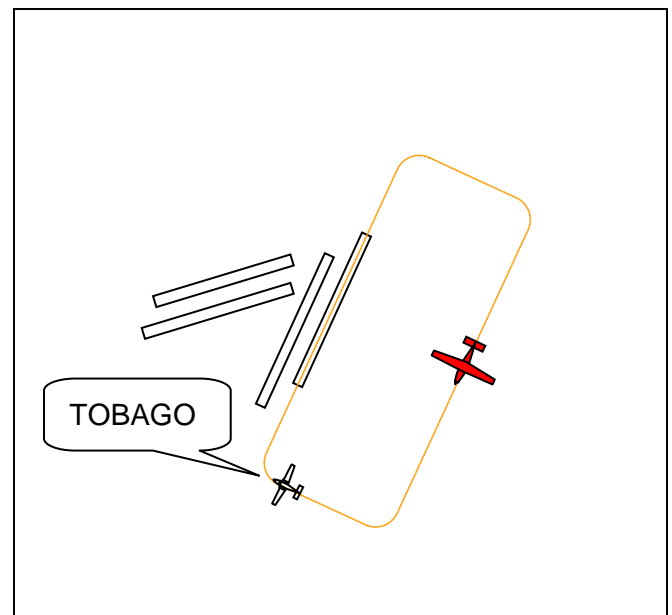
YTJ



18. HZN, mid-downwind for full stop.

HZN, follow a Tobago late base, that aircraft also for a full stop.

HZN

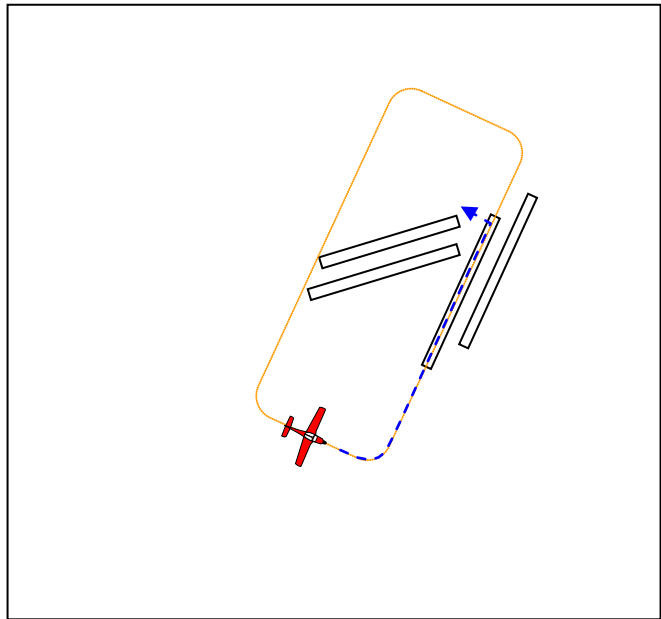


LANDING CLEARANCES

19. MCK, base, full stop.

MCK, 03 left, vacate at the upwind end, cleared to land.

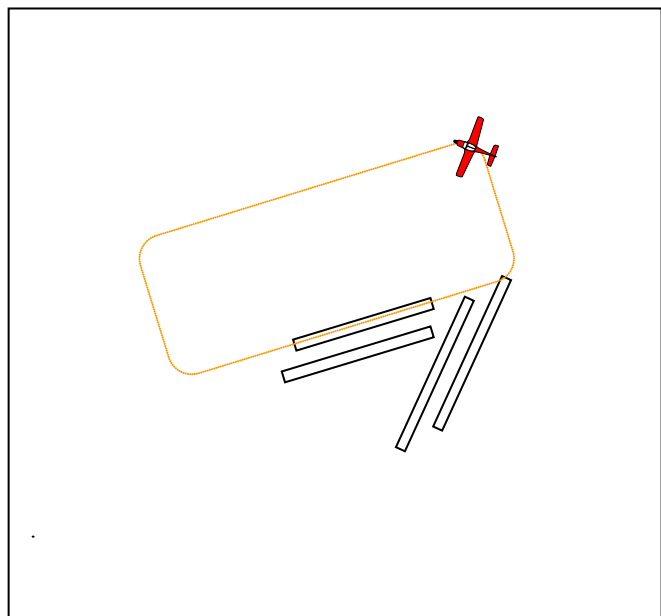
Runway 03 left, cleared to land, vacate upwind end, MCK.



20. TGT downwind, touch and go.

TGT, 08 left, clear touch and go.

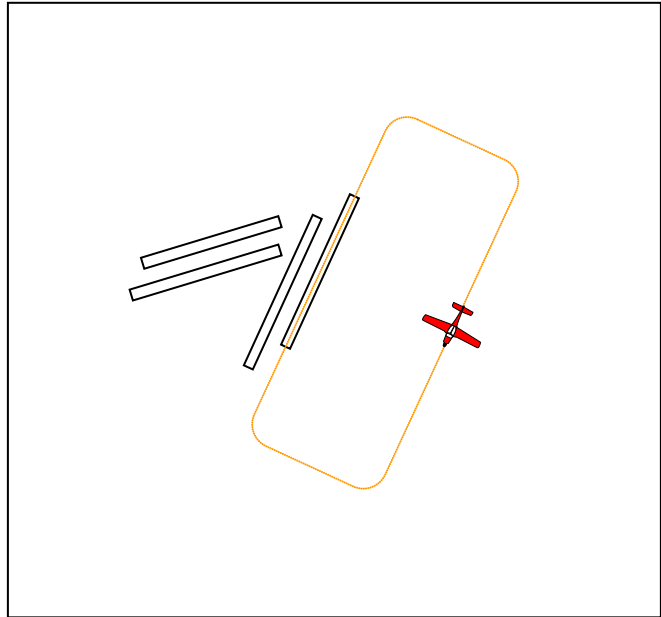
Runway 08 left, cleared touch and go, TGT.



21. TGZ, mid downwind, request stop and go.

TGZ, 03 right, cleared stop and go.

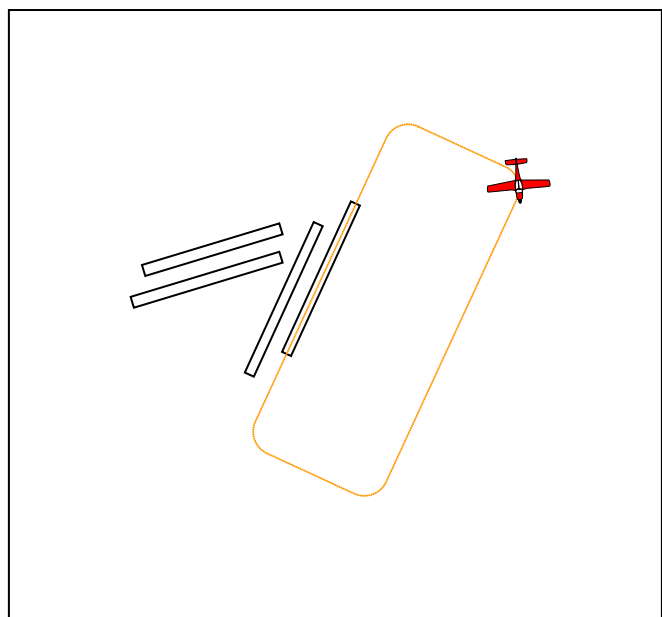
Runway 03 right, cleared stop and go, TGZ



22. TGZ, downwind, stop and go.

TGZ, make this one a touch and go, runway 03 right, cleared touch and go.

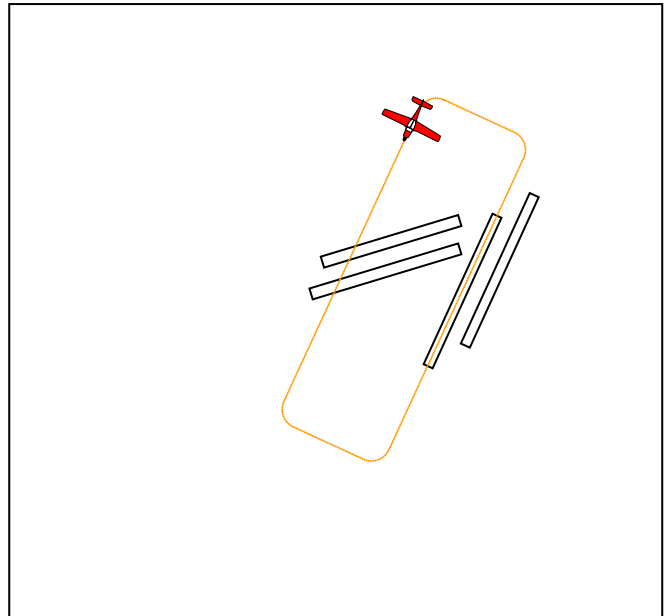
Runway 03 right, cleared touch and go, TGZ.



23. TGZ, low level downwind, touch and go.

TGZ, 03 left, clear touch and go.

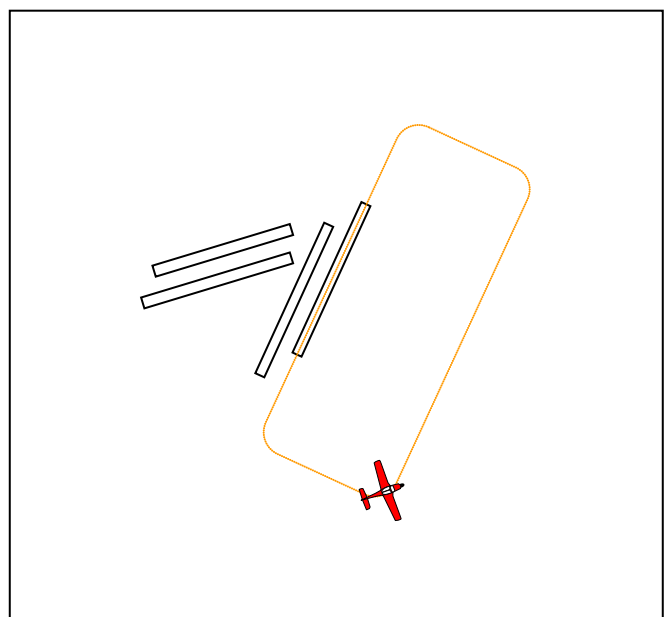
Runway 03 left, cleared touch and go, TGZ.



24. TGE, downwind, touch and go.

TGE, number 1, 21 left, clear touch and go.

Runway 21 left, cleared touch and go, TGE.



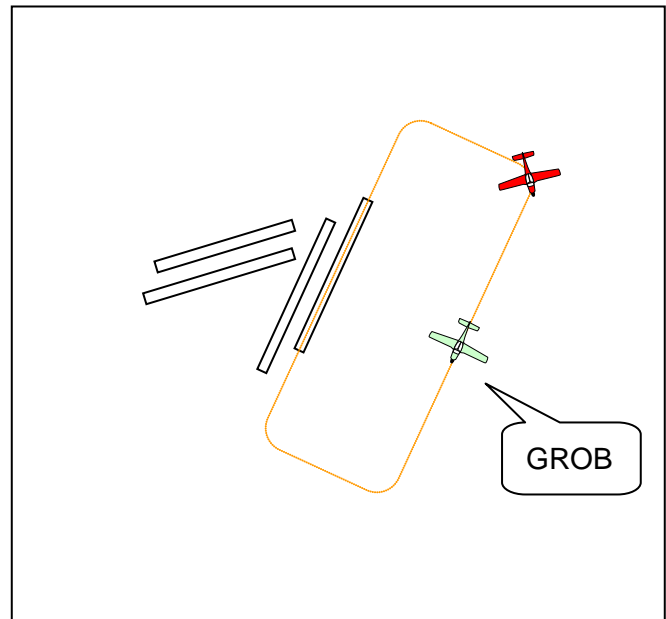
25. TGP, downwind, touch and go.

TGP, follow the Grob ahead.

TGP

TGP, disregard that traffic, 03 right clear touch and go.

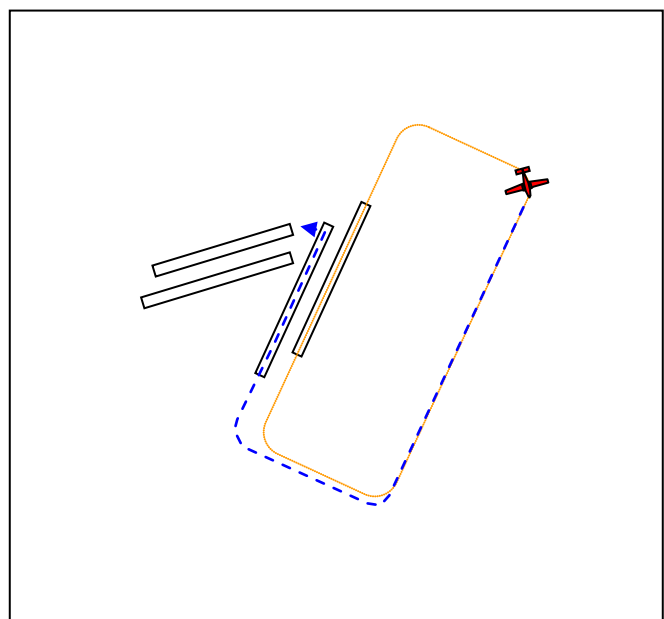
Runway 03 right cleared touch and go, TGP



26. YTX, downwind, for full stop.

YTX, continue on a right base for 03 left. Runway 03 left, long landing is available.
Vacate at the upwind end, cleared to land.

Right base for runway 03 left, cleared to land, vacate upwind end, YTX

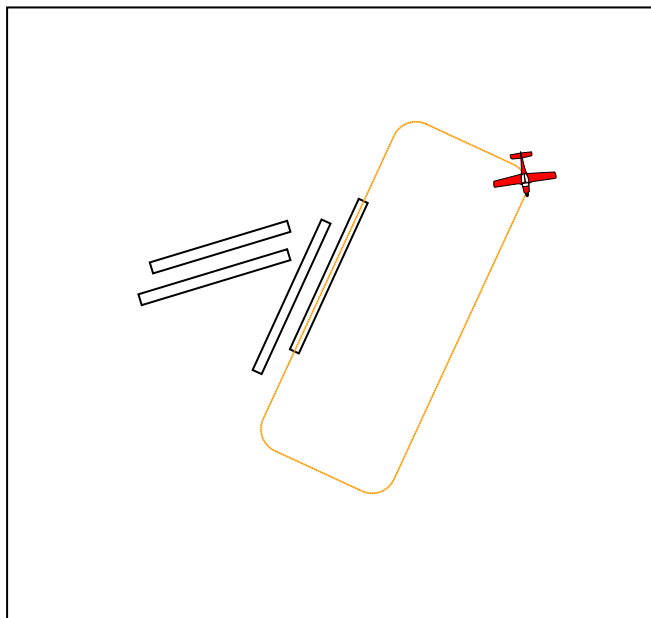


INSTRUCTIONS AND/OR TRAFFIC INFORMATION

27. TGT, downwind, glide approach.

TGT, continue approach.

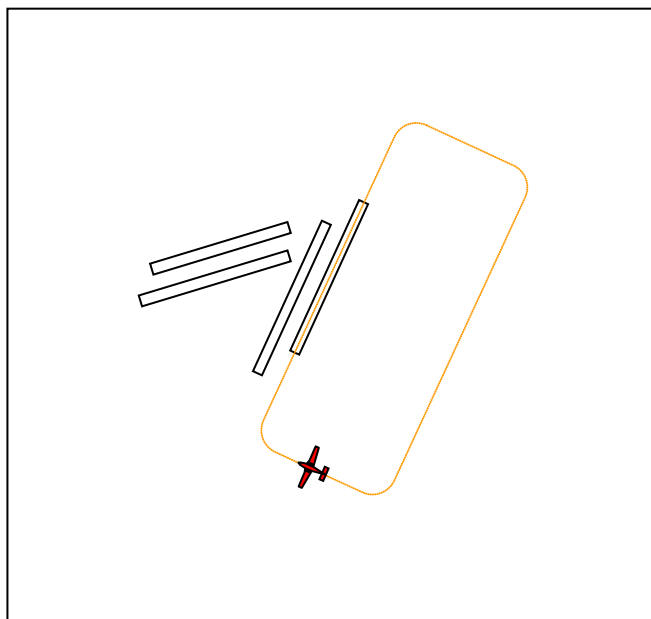
Continue approach, TGT.



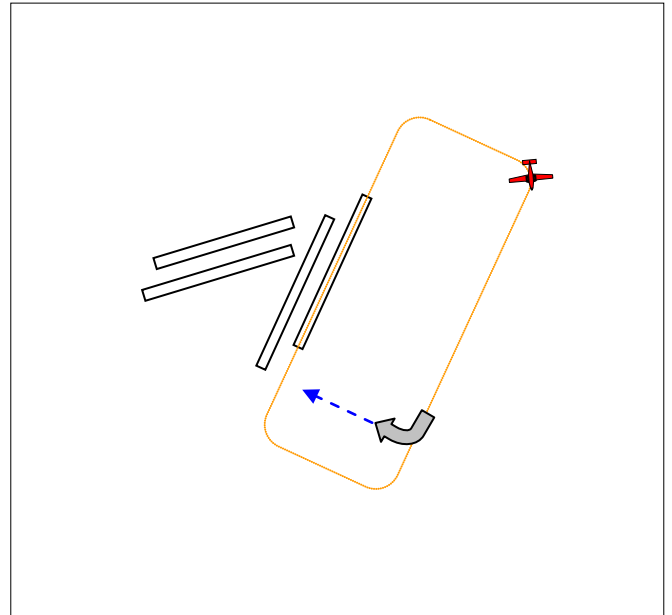
28. YTT, base, full stop.

YTT, continue approach

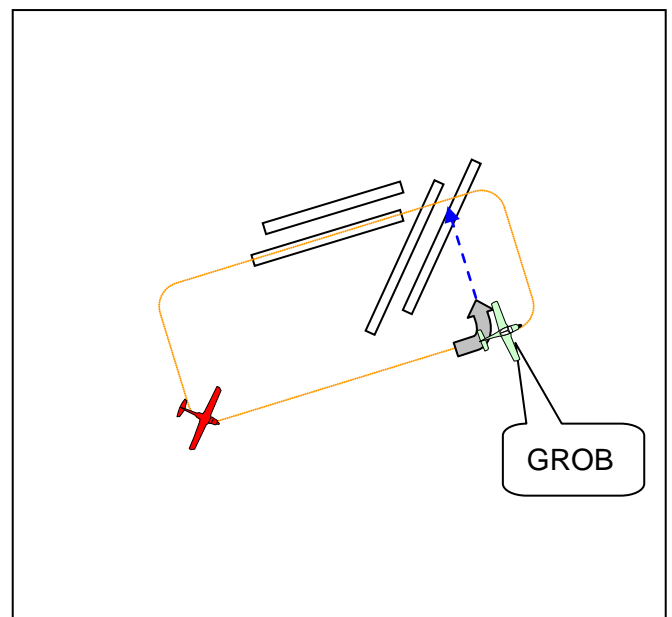
Continue approach, YTT



29. YTT, turning downwind, touch and go
YTT, make a close base, continue approach.
Close base, continue approach, YTT



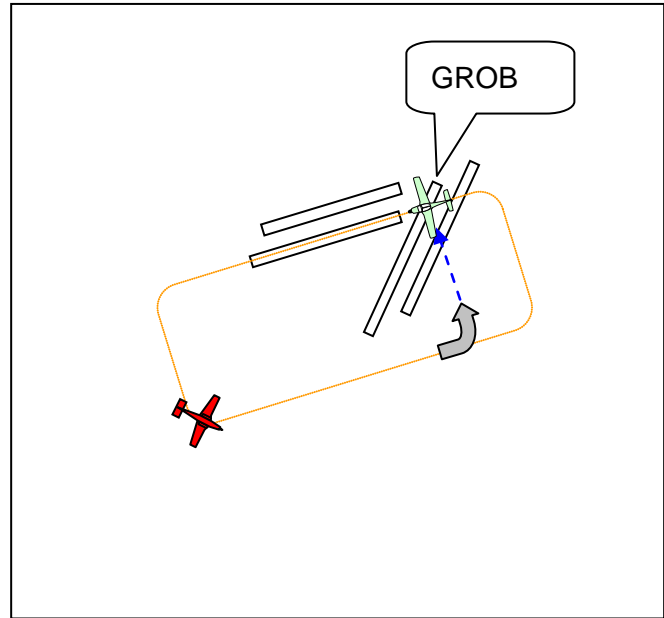
30. HXX, downwind, touch and go.
HXX, request a close base, and follow the Grob late downwind
Close base, HXX



31. BUN, turning downwind, touch and go.

BUN, request a close base and follow the Grob that's on short final.

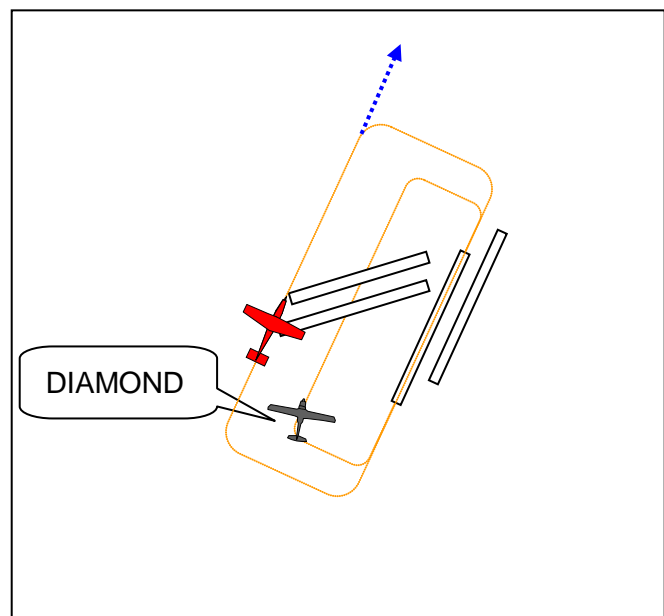
Close base, BUN



32. LCY, downwind, touch and go

LCY, continue downwind till advised thanks, you'll be following a Diamond just turned a low level downwind, back in your 5 o'clock.

Continue downwind, LCY



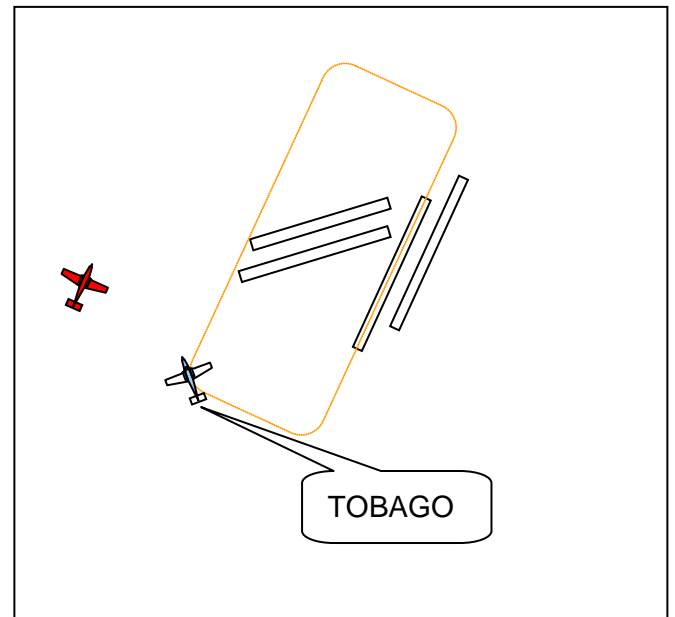
33. YTQ, high downwind, for full stop

YTQ, roger, follow that Tobago back in about your 4 o'clock, on err turning downwind for runway 21

YTQ

YTQ roger, follow the Tobago, cleared visual approach

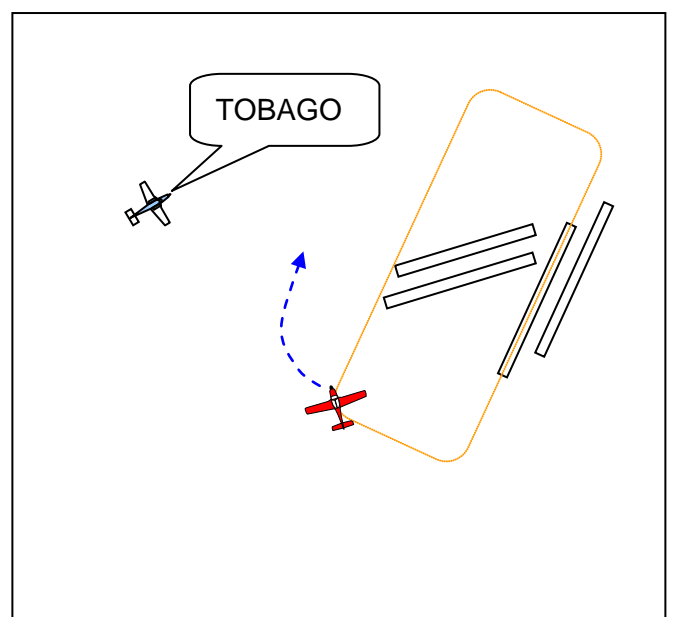
Cleared visual approach, YTQ



34. TGT, turning downwind, touch and go

TGT, widen out your downwind leg to follow a Tobago inbound from Outer Harbor at 1500

Widen out, TGT



35. LCY, downwind, touch and go

LCY, if you could tighten it up thanks, that would be helpful. You'll be number 1 for traffic on a low level downwind.

Tighten up, LCY

