Audio Scripts

Section 1

	ATC	Pilot
1	Nelson Terminal Information Bravo at 0200 UTC. Runway 31 Left, 31 Right and 25 for departures and 31 Right for arrivals. Parallel runway operations in progress. Wind: Calm. Visibility: 1000 metres in mist to the south, 10 kilometres or greater elsewhere. Cloud: Few 800; scattered 3000. Areas of fog to the south and east. Temperature 1 QNH 1022. On first contact with Nelson Ground or Approach notify receipt of Bravo.	
2		Nelson Clearance Delivery, Pacific 117 for Curran requesting airways clearance.
	Pacific 117, cleared to Curran via amended route MOSSY, LISON, planned route, MOSSY 4 departure, maintain 5000 Runway 31 Left, squawk code 2601, Departures frequency 123.5	
		Cleared to Curran via amended route MOSSY, LISON, planned route, MOSSY 4 departure, maintain 5000 Runway 31 Left, squawk code 2601, Departures frequency 123.5, Pacific 117.
3		Nelson Ground good morning, Skyways 23 requesting start and pushback from Bay 8.
	Skyways 23 Ground good morning, company A320 just taxiing from Bay 7, when clear of that aircraft start and pushback approved.	
		Clear of the outbound A320, start and pushback approved, Skyways 23.
4		Ibisair 150 received Bravo, request taxi clearance for a Bravo intersection departure.
	Ibisair 150, cleared to taxi via Delta 3 then Alpha hold short of Bravo. I will advise on the intersection departure, time 29.	
		Cleared to taxi via Delta 3 and Alpha and hold short of Bravo, Ibisair150.
5	Ibisair 150, taxi via Delta 3, follow the	

	outbound Fokker 28 and Boeing 777, then left on Alpha, expedite crossing Runway 25, continue on Alpha to holding point Delta 1, Runway 31 Right. Intersection departure not available due wake turbulence from the preceding heavy – we'll get you away a little quicker this way.	
		Roger, follow the outbound Fokker 28 and Boeing 777 via Delta 3 and Alpha, to holding point Delta 1. Runway 31 Right for the full length, Ibisair 150.
6	Qantas 309, there is a fog bank now moving across Runway 25 from the south, with RVR reduced to 300 metres south of Runway 31 Left. Will a departure still be acceptable from 25?	
		Qantas 309, err we require a minimum of 400 metres visibility.
	Qantas 309, roger. At this stage continue for 25, the fog banks are moving through in waves with a light southerly and we also expect the fog to continue to break up. There may be just a short delay at the holding point.	
7		Tower, Pacific 117 ready, Runway 31 Right request RVR.
	Pacific 117, RVR now 200 metres over and north of Runway 31 Right, I understand your minimum is 400 metres?	
		Affirm that is correct, Pacific 117.
	Pacific 117, understood. The fog is currently clear of Runway 31 Left. Runway 31 Left is available, however there may still be a delay due traffic.	
		Err…we'd prefer to continue for Runway 31 Right Pacific 117
	Pacific 117, 747 departing, behind that aircraft line up and wait, Runway 31 Right behind, cancel SID.	
		Behind the departing 747, line up and wait, Runway 31 Right. Cancel SID, Pacific 117.
	Pacific 117, expect a further 2 minute delay on the runway, the fog bank is also now just clearing 31 Right and the visibility is clear behind.	
		Pacific 117.
8	Ibisair 150, assigned heading left 230, remain this frequency airborne, Runway 31 Right cleared for take-off.	
		Left heading 230, Runway 31 Right, remain tower frequency, cleared for take-off Ibisair 150.

9		Nelson Departures Pacific 117 left 1100 on climb to 5000.
	Pacific 117 Departures identified, climb to 8000.	
		8000 Pacific 117.
	Pacific 117 turn right heading 360, short delay at 8000 due crossing traffic.	
		Right heading 360 and we've got the traffic sighted above in our 2 o'clock position, Pacific 117.
	Pacific 117, roger, expect climb in 3 miles.	
		Pacific 117.
10	Qantas 309 climb to FL130.	
		Leaving 8000 for FL130, Qantas 309.
	Qantas 309 position 7 miles southwest of MOSSY, resume own navigation track direct LISON, planned route, climb to and maintain FL280, contact Centre on 131.4	
		Direct LISON, climb to and maintain FL280 131.4, Qantas 309.

Section 2

ATC	PILOT
	Curran Departures, Pacific 183 passing 1200 climbing to 7000.
Pacific 183 Curran Departures identified, cancel SID, turn left heading 190; due slower preceding traffic.	
	Cancel SID, turn left heading 190, Pacific 183.
Pacific 183, climb to FL200, position 25 miles east of TAMAR, cancel radar heading re-cleared direct TAMAR, planned route.	
	Climb FL200, direct TAMAR, planned route, Pacific 183.
Pacific 183 contact Centre 122.4	
	122.4 Pacific 183.
	Centre, Pacific 183 left FL140 on climb to FL200.
Pacific 183 Centre, Good afternoon	
	Pacific 183, err, we are getting a gradual ice build up as a result of suspected de-icing equipment failure. We require descent to below the freezing level and will advise shortly if the problem can be rectified.
Pacific 183 roger descend to 9000 QNH 1014.	
	Pacific 183, 9000 thanks.
Pacific 183 let me know if you require lower, do emergency conditions exist?	
	Pacific 183, that should be sufficiently low enough and negative, emergency conditions do not exist.
Pacific 183.	
	Pacific 183, we will require return to the field and an extra 15 mins Enroute for fuel dumping.
Pacific 183 understood, turn right heading 330, expect Runway 15.	
	Right heading 330, Pacific 183.
Pacific 183 do you expect your approach and landing to be normal?	
	Affirm, Pacific 183.
Pacific 183 orbit left in your present position, wide orbits approved fuel dumping approved, report on completion.	
	Left hand orbits until advised, we're commencing the fuel dump this time, Pacific 183.
Pacific 183.	
	Centre from Pacific 183, we've completed the fuel dump and request onwards clearance.

Pacific 183 roger, on completion of this orbit fly heading 320 and contact Approach on 131.3	
	Depart the orbit heading 320, confirm Approach on 121.3 Pacific 183.
Pacific 183, ah negative on the frequency, contact Approach on 131.3	
	Roger, Approach 131.3, Pacific 183.
	Approach, Pacific 183 maintaining 9000 on top of scattered, received information Yankee.
Pacific 183 Approach, descend to 3000, right circuit Runway 15, 29 track miles to run.	
	Leaving 9000 for 3000 Pacific 183.
	Pacific 183, we have a further problem with our leading edge flap extension and believe this is due to the prior icing issue; perhaps just a micro-switch malfunction, however we'll be conducting a flapless landing and will require Runway 26 Left or Right.
Pacific 183 roger, change of Runway 26 Left, turn right heading 080 for downwind, now with 24 track miles to run, amend descent, maintain 4000.	
	Runway 26 Left thanks, right turn heading 080 and maintain 4000 Pacific 183.

Section 3

Andrew: Cliff and Susan Good morning to you both… please come in… and… take a seat.

Cliff: Thank you Andrew.

Susan: Good morning Andrew.

Andrew: I'm sure you know why I've called you in this morning.

Cliff: Well, I guess it's to discuss the incident near Fisherville yesterday afternoon.

Andrew: That's right… your near-miss on Pacific flight 297. But please understand that it's just a routine, informal debrief… and the reason we cancelled your sectors today was just so we could discuss what happened as soon as possible.

Susan: Okay.

Andrew: Now, let's look at what happened on your third sector yesterday, from Nelson into Fisherville. Cliff, can you please take me through it?

Cliff: Sure. Apart from that incident, the rest of the flight was routine - although we pushed back seven minutes late at Nelson.

Andrew: And why was that?

Cliff: Ah, we had to off-load some luggage after two passengers failed to show up.

Andrew: Do you feel that this put you under any pressure Cliff?

Cliff: Oh, it may have a little – we had a forecast headwind of about 80 knots, so it would have been hard for us to get to Fisherville by our scheduled arrival time.

Andrew: OK, fine. Ah… sorry, just for the record, who was pilot flying and who was pilot not flying?

Susan: Cliff was in command and I was pilot not flying.

Andrew: Thanks. Go on Cliff.

Cliff: Our departure, cruise and top of descent were all without incident. ATC advised us of traffic – a Cessna 210 - outside controlled airspace, inbound to North Rocks, about 10 miles past Fisherville out to the northwest.

Andrew: Yeah, I'm familiar with the area.

Cliff: That aircraft was at 8000 - we over flew it about 40 miles out, so it was certainly no problem. There was no other traffic, was there Susan? None that ATC advised us of anyway.

Susan: No, there was nothing else – in fact it was fairly quiet on 'Centre' frequency.

Cliff: We transferred to the local area frequency at about 20 DME and made our initial inbound call.

Andrew: Just so I can visualise the timeline on this, ah, do you recall your estimate for Fisherville, or for the circuit area, and how high you were when you made the first call on the local area frequency?

Cliff: Err, Susan?

Susan: Yes, we were estimating the circuit at time 36, that'd be ah… 1136 UTC and umm… from memory, I think we may have been approaching 6000… that's in line with company policy.

Andrew: Thanks Susan. Now, were there any responses to your call Susan?

Susan: Only one… there was a Cessna 172 who reported on final for 19 for a full stop.

Andrew: I see. OK, go on please Cliff.

Cliff: Well, we slowed quite a lot at about 10 DME and took the first stage of flap. Susan sighted the field at 12 o'clock. The forecast wind was an 8 knot southerly, and this was also supported by the Cessna on Runway 19. I broke right, anticipating joining a left circuit for 19, but I stayed a little high until we could confirm the wind direction indicated by the windsock. And Susan also then made a circuit joining call.

Andrew: Susan, did you specifically say a *left* circuit for Runway 19?

Susan: Yep! I advised we were going to be joining early downwind for 19. About a minute after the call, we were approaching the upwind end of the field and Cliff confirmed that the windsock was indicating about a 10 to 12 knot southerly… and also that the Cessna was clear of the runway and taxiing onto the main apron.

Cliff: And then suddenly, about mid downwind, I spotted a low wing light aircraft at our 10 o'clock descending into us – no more than about 300 feet above.

Andrew: Can you recall about how far from you he was when you first sighted him? Laterally, that is?

Susan: Well, I didn't see it quite as quickly as you did, Cliff, but, yes, I'd say 1500 metres would be a pretty good estimate. It looked like a Piper Lance.

Andrew: Didn't you get a TCAS alert?

Cliff: We received no TA's or RA's whatsoever – I think this pilot was probably VFR… and not even have been equipped with a transponder.

Andrew: Right, I see!

Cliff: Anyhow, I descended rather abruptly whilst also turning right – probably about a 30 degree bank angle.

Andrew: Was there any avoiding action taken by the Piper?

Cliff: I don't believe so… although he may have levelled off because, to be honest, I'm surprised that we didn't collide. Susan wasn't able to see the aircraft on her side after we'd passed. She did make a couple of further radio calls, though, to try and make contact with him, but there was no response at all.

Andrew: I guess by then you felt pretty shaken up.

Cliff: Yeah, we did. So then we lowered the gear and took further flap, and we continued with a normal approach and landing, except that it was a much longer downwind than usual.

Andrew: And why was that?

Cliff: Well, we needed to refocus on managing the aircraft… and also allow time to complete our approach checklist – just so that we were both calm and collected enough to be able to make a safe approach and landing. And our landing was without further incident.

Andrew: How were you feeling immediately afterwards Susan? Still on downwind?

Susan: Oh, a bit shocked by what had just happened… but still able to perform as required.

Andrew: Good. So, after your landing, did the aircraft in question show up at all at Fisherville?

Cliff: Negative. We didn't see it again.

Andrew: Did you have much time on the ground then?

Cliff: Yes, well fortunately we had a 90 minute turn around yesterday, so I actually went and had a chat with the chief flying instructor at the flying school. They're the owners of the Cessna 172 that had landed prior to our arrival.

Andrew: Oh OK… that was a good idea! And what did they say?

Cliff: Well, that was interesting. Phil there thought that it was probably a Piper Lance. There's one that he's seen fly overhead once a week – normally much higher than circuit altitude, though.

Andrew: Thanks for following that up Cliff. I'll include that in the company report and… err… it certainly doesn't sound like there'll be any repercussions on you – you did everything by the book. Is there anything you would have done differently?

Cliff: Ah, well I should probably have made an informed decision to use Runway 19 when we were still 10 miles out, and then have descended to circuit height earlier. That would have put us lower and given us greater clearance from the Piper.

Andrew: Do either of you have anything more to add? Susan?

Susan: No, that's pretty much covered everything, Andrew.

Andrew: Thanks Susan. Cliff, anything more to add?

Cliff: Just one thing Andrew. To help prevent a recurrence of this kind of incident, I'd like to suggest that transponders be used outside controlled airspace, so that we're aware of any light aircraft operating in our vicinity. It may even just be a matter of further pilot education, to stress the importance of switching them on if the equipment is fitted!

Andrew: OK. Well, thanks Cliff, thanks Susan… I'm grateful to you for coming in so early this morning to discuss this. You can expect your regular schedules to be resumed tomorrow, as per your original roster.

Cliff: Thanks Andrew, its no problem.

Susan: Yeah, thanks Andrew.