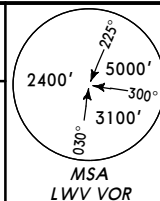
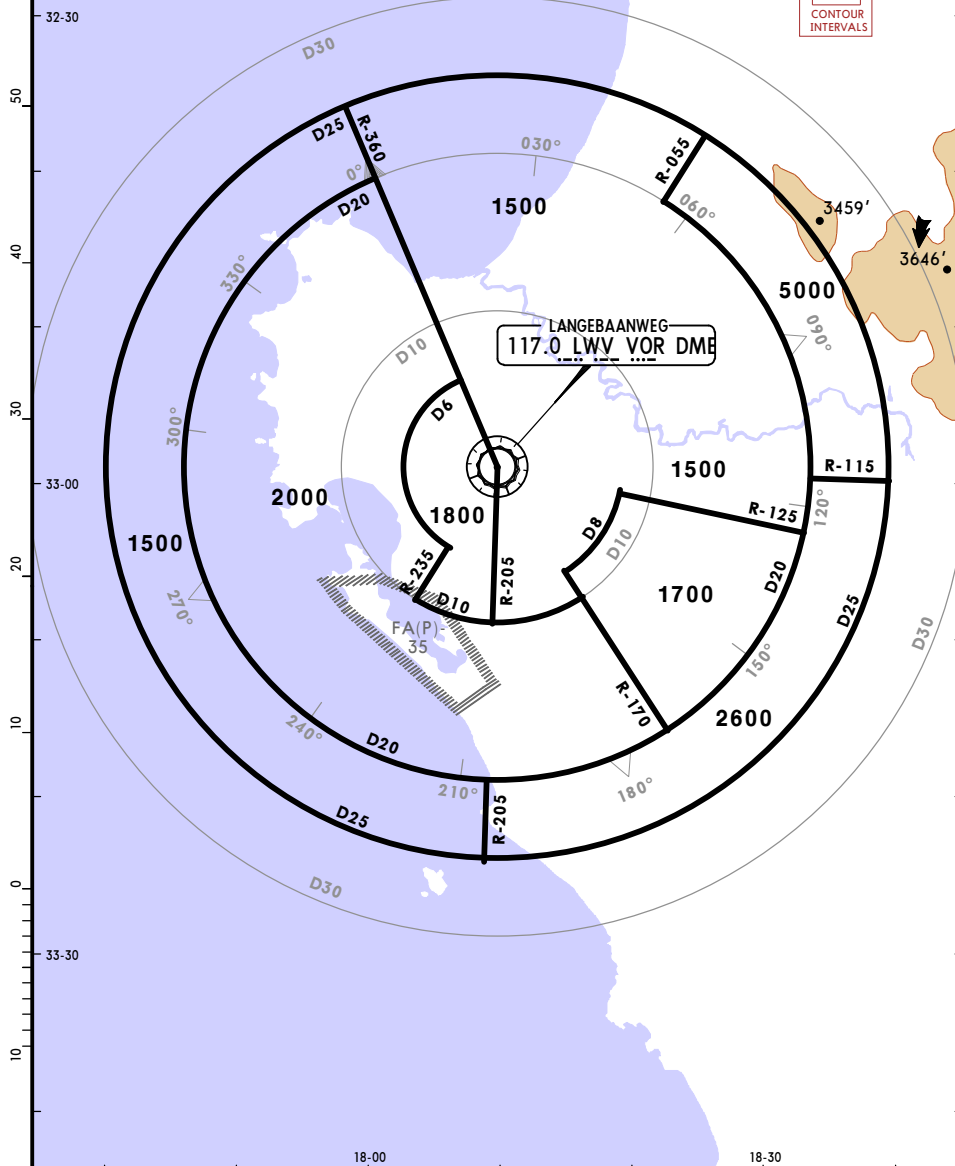
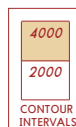


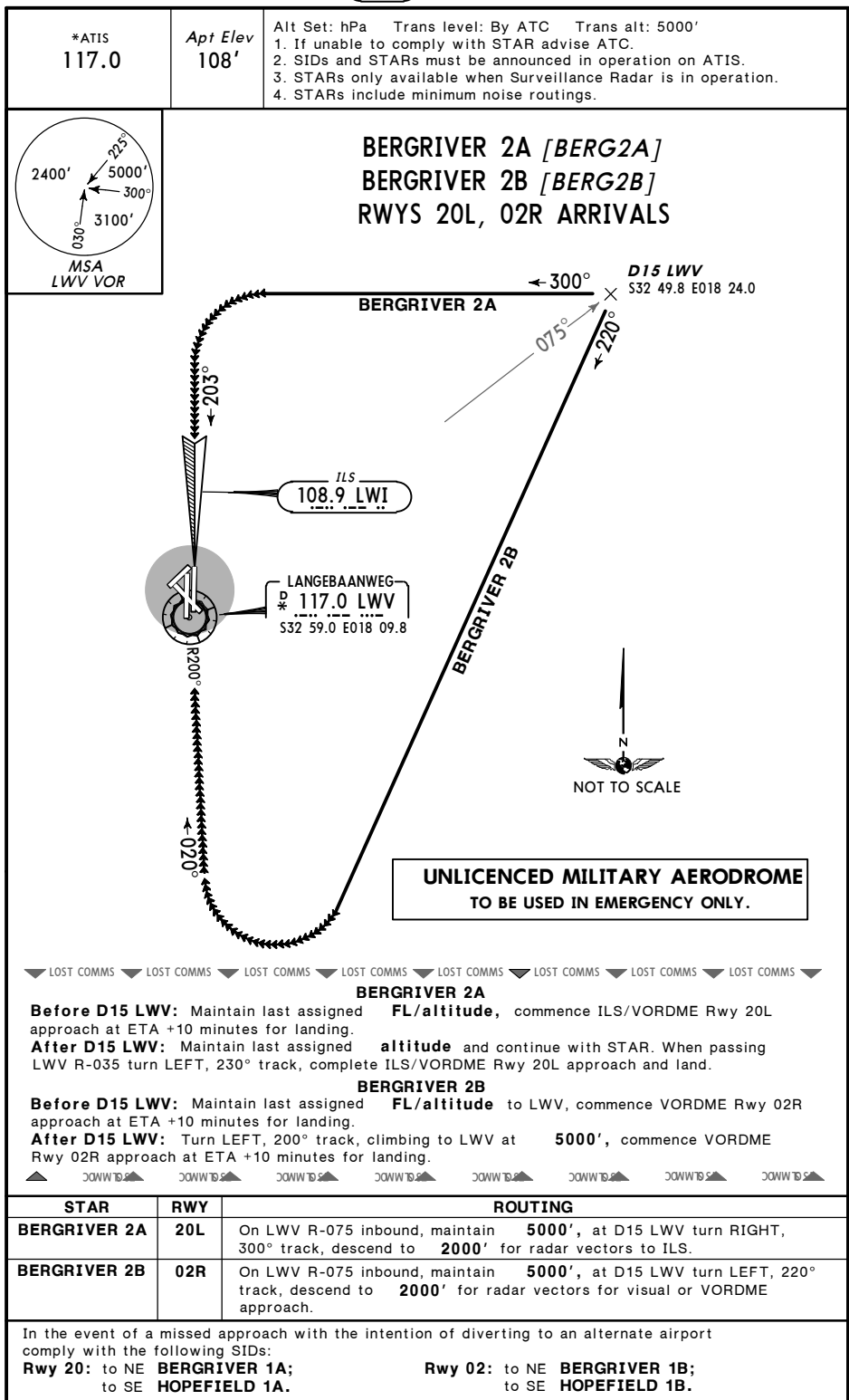
Apt Elev
108'

Alt Set: hPa Trans level: By ATC Trans alt: 5000'
Radar minimum altitudes only valid when under positive radar control and radar vectoring. Alternatively MSA applies.



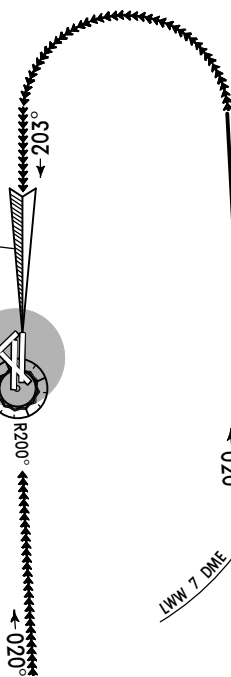
**UNLICENCED MILITARY AERODROME
TO BE USED IN EMERGENCY ONLY.**





Alt Set: hPa Trans level: By ATC Trans alt: 5000'

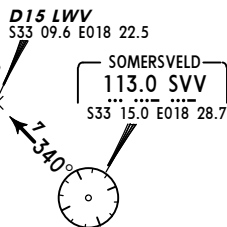
1. If unable to comply with STAR advise ATC.
2. SIDs and STARs must be announced in operation on ATIS.
3. STARs only available when Surveillance Radar is in operation.
4. STARs include minimum noise routings.



HOPEFIELD 2A [*HOPE2A*]
HOPEFIELD 2B [*HOPE2B*]
RWYS 20L, 02R ARRIVALS



**UNLICENCED MILITARY AERODROME
TO BE USED IN EMERGENCY ONLY.**



▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼

Before D15 LWV: Maintain last assigned **FL/altitude** to LWV, commence ILS/VORDME Rwy 20L approach at ETA +10 minutes for landing.

After D15 LWV: Climb on last assigned heading to **5000'**, turn to LWV, commence ILS/VOR-DME Rwy 20L approach at ETA +10 minutes for landing.

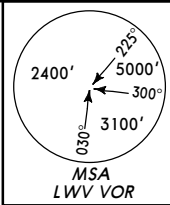
Before D15 LWV: Maintain last assigned **FL/altitude** to LWV, commence VORDME Rwy 02R approach at ETA +10 minutes for landing.

After D15 LWV: Turn LEFT, 270° track, climbing to LWV at **5000'**, commence VORDME Rwy 02R approach at ETA +10 minutes and land.

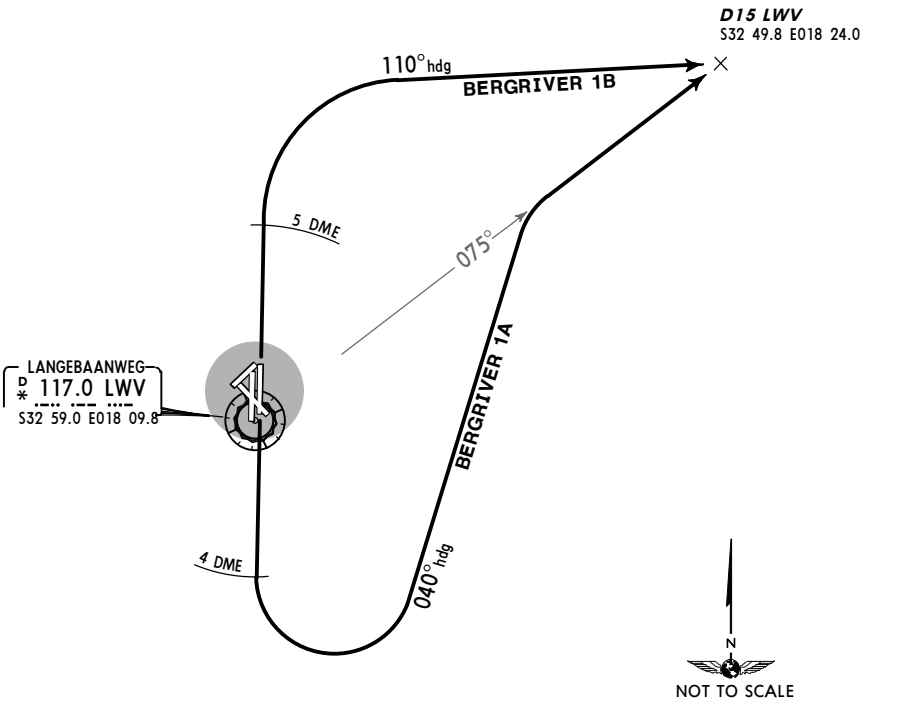
Rwy 02: to NE **BERGRIVER 1A;**
to SE **HOPEFIELD 1A.**

*LANGEBAANWEG Approach (R) 122.5	Apt Elev 108'	Trans level: By ATC Trans alt: 5000' 1. If unable to comply with SID advise ATC. 2. SIDs only applicable when Surveillance Radar is in operation. 3. At 3000' contact LANGEBAANWEG Approach. 4. SIDs include minimum noise routings.
--	------------------	---

BERGRIVER 1A [BERG1A]
BERGRIVER 1B [BERG1B]
RWYS 20L, 02R DEPARTURES
SPEED MAX 230 KT



UNLICENCED MILITARY AERODROME
TO BE USED IN EMERGENCY ONLY.



▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼

Comply with SID maintain **FL80** or last assigned **FL**. At SID termination point continue as per flight plan.

Aircraft wishing to return must continue to SID termination point. Leave controlled airspace via the shortest route and remain clear of controlled airspace for 5 minutes, then return via

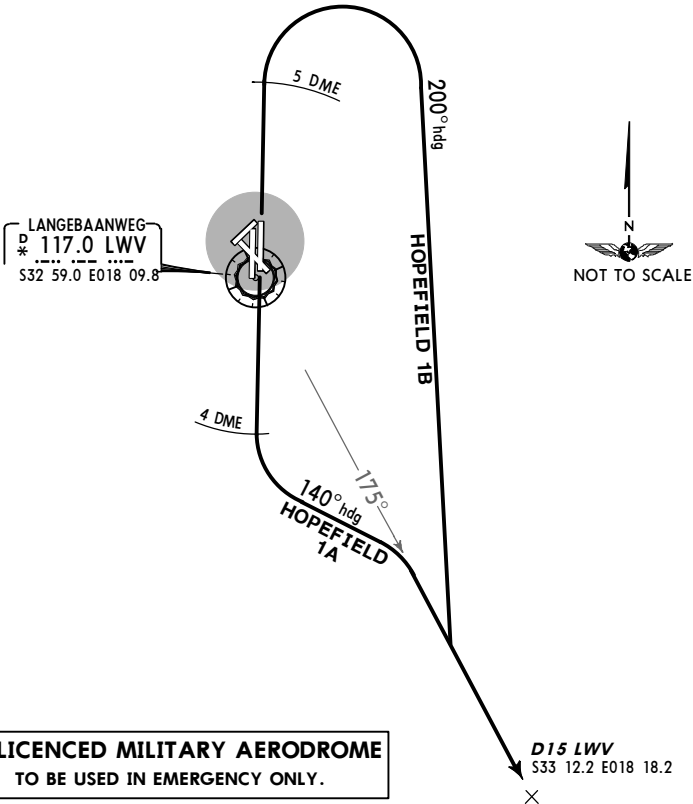
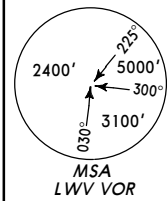
BERGRIVER 1A: BERGRIVER 2A STAR LOST COMMS procedure.
BERGRIVER 1B: BERGRIVER 2B STAR LOST COMMS procedure.

▲ COMMS TO ▲ COMMS TO ▲ COMMS TO ▲ COMMS TO ▲ COMMS TO ▲ COMMS TO ▲ COMMS TO ▲ COMMS TO ▲

SID	RWY	ROUTING
BERGRIVER 1A	20L	On runway heading to LWV 4 DME, climbing to 3000' , turn LEFT , 040° heading, intercept LWV R-075, climbing to FL80 , at D15 LWV as per flight plan.
BERGRIVER 1B	02R	On runway heading to LWV 5 DME, climbing to 3000' , turn RIGHT , 110° heading, intercept LWV R-075, climbing to FL80 , at D15 LWV as per flight plan.

*LANGEBAANWEG Approach (R) 122.5	Apt Elev 108'	Trans level: By ATC Trans alt: 5000' 1. If unable to comply with SID advise ATC. 2. SIDs only applicable when Surveillance Radar is in operation. 3. At 3000' contact LANGEBAANWEG Approach. 4. SIDs include minimum noise routings.
--	------------------	---

HOPEFIELD 1A [HOPE1A]
HOPEFIELD 1B [HOPE1B]
RWYS 20L, 02R DEPARTURES
~~SPEED~~ MAX 230 KT



▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼ LOST COMMS ▼

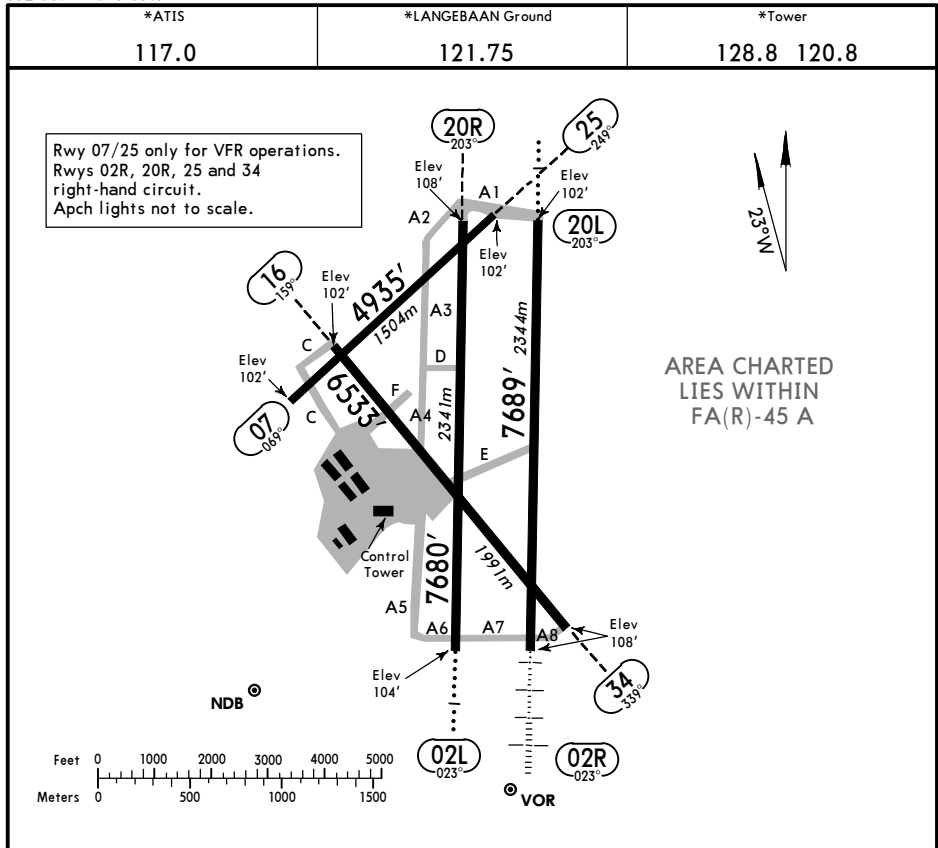
Comply with SID maintain **5000'** or last assigned **FL**. At SID termination point continue as per flight plan.

Aircraft wishing to return must continue to SID termination point. Leave controlled airspace via the shortest route and remain clear of controlled airspace for 5 minutes, then return via

HOPEFIELD 1A: HOPEFIELD 2A STAR LOST COMMS procedure.
HOPEFIELD 1B: HOPEFIELD 2B STAR LOST COMMS procedure.

▲ COME TO ▲ COME TO ▲ COME TO ▲ COME TO ▲ COME TO ▲ COME TO ▲ COME TO ▲ COME TO ▲

SID	RWY	ROUTING
HOPEFIELD 1A	20L	On runway heading to LWV 4 DME, climbing to 3000' , turn LEFT , 140° heading, intercept LWV R-175, climbing to 5000' , at D15 LWV as per flight plan.
HOPEFIELD 1B	02R	On runway heading to LWV 5 DME, climbing to 3000' , turn RIGHT , 200° heading, intercept LWV R-175, climbing to 5000' , at D15 LWV as per flight plan.



ADDITIONAL RUNWAY INFORMATION						
RWY				USABLE LENGTHS		WIDTH
				LANDING BEYOND		
				Threshold	Glide Slope	TAKE-OFF
02R	RL	HIALS	PAPI (angle 3.00°)			
20L	RL	ALS	PAPI (angle 3.00°)		7022' 2140m	135' 41m
02L	RL	ALS	PAPI (angle 3.00°)			150' 46m
20R	RL	PAPI (angle 3.00°)				150' 46m
07						
25	RL	(blue)				150' 46m
16						
34	RL	PAPI (angle 3.00°)				150' 46m

JAR-OPS		TAKE-OFF 1	
LVP must be in Force		All Rwys	
RCLM (DAY only) or RL		RCLM (DAY only) or RL	NIL (DAY only)
A	250m	400m	500m
B			
C			
D	300m		
1 Operators applying U.S. Ops Specs: CL required below 300m.			

STRAIGHT-IN RWY		A	B	C	D
02R	VOR ❶	490'(382')	490'(382')	490'(382')	490'(382')
		R1400m	R1400m	R1400m	R1600m
	ALS out	R1500m	R1500m	R1800m	R2000m
20L	ILS	302'(200')	302'(200')	302'(200')	302'(200')
		R1000m	R1000m	R1000m	R1000m
	ALS out	R1200m	R1200m	R1200m	R1200m
	VOR DME ❶	490'(388')	490'(388')	490'(388')	490'(388')
		R1500m	R1500m	R1600m	R1800m
	ALS out	R1500m	R1500m	R1800m	R2000m
	VOR	540'(438')	540'(438')	540'(438')	540'(438')
		R2000m	R2000m	C2200m	C2200m
	ALS out	C2200m	C2200m	C2400m	C2400m
34	NDB ❷	520'(412')	520'(412')	520'(412')	520'(412')
		C2100m	C2100m	C2300m	C2300m
	NDB ❸	990'(882')	990'(882')	990'(882')	990'(882')
		C4200m	C4200m	C4400m	C4400m

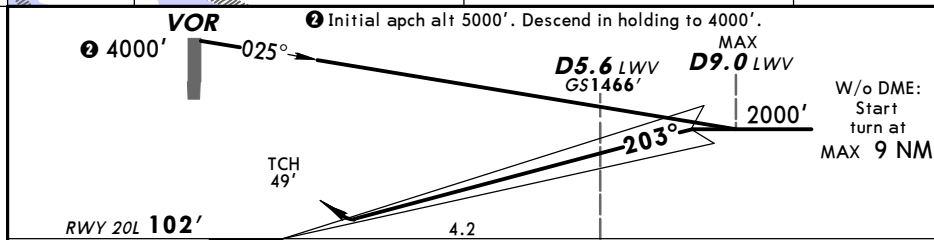
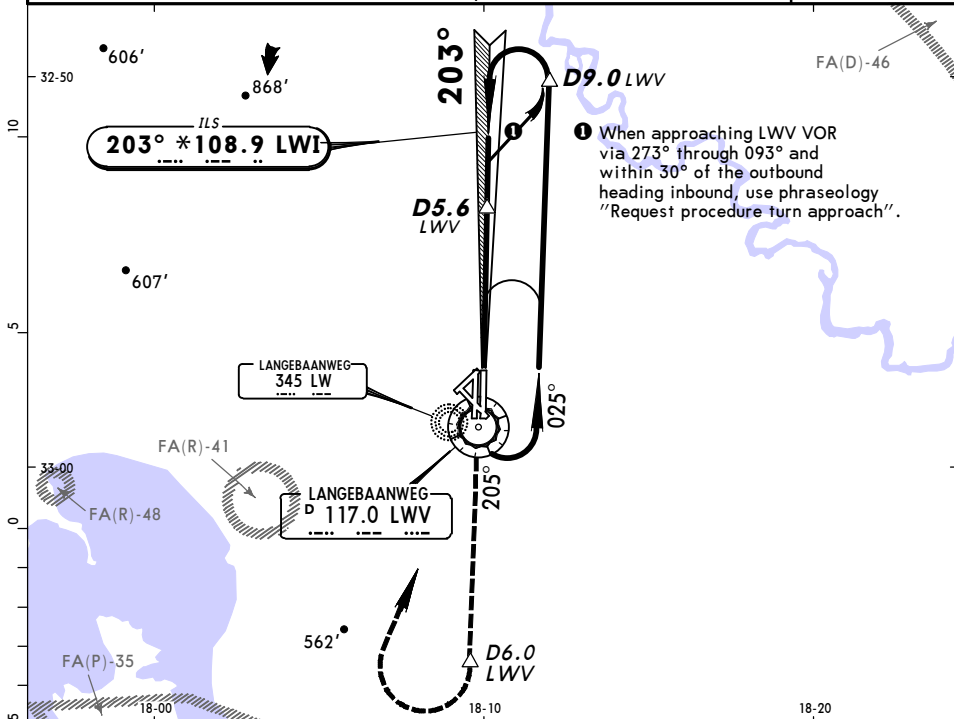
- ❶ Continuous Descent Final Approach.
- ❷ with DME.
- ❸ w/o DME.

CIRCLE-TO-LAND ❹	A	B	C	D
	MINIMUMS NOT YET ESTABLISHED BY S AFR REP CAA			

- ❹ Entirely at pilots discretion.

TAKE-OFF RWY 02L/R, 07, 16, 20L/R, 25, 34		
LVP must be in force		
RCLM (DAY only) or RL	RCLM (DAY only) or RL	NIL (DAY only)
A	400m	500m
B		
C		
D	300m	

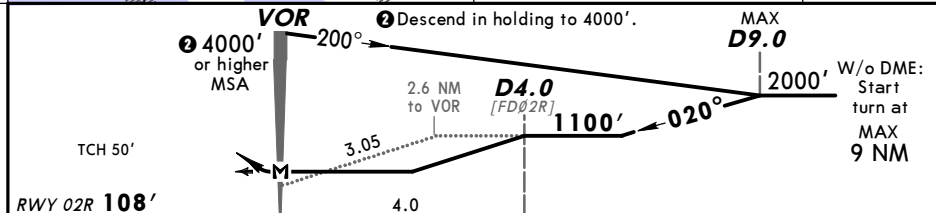
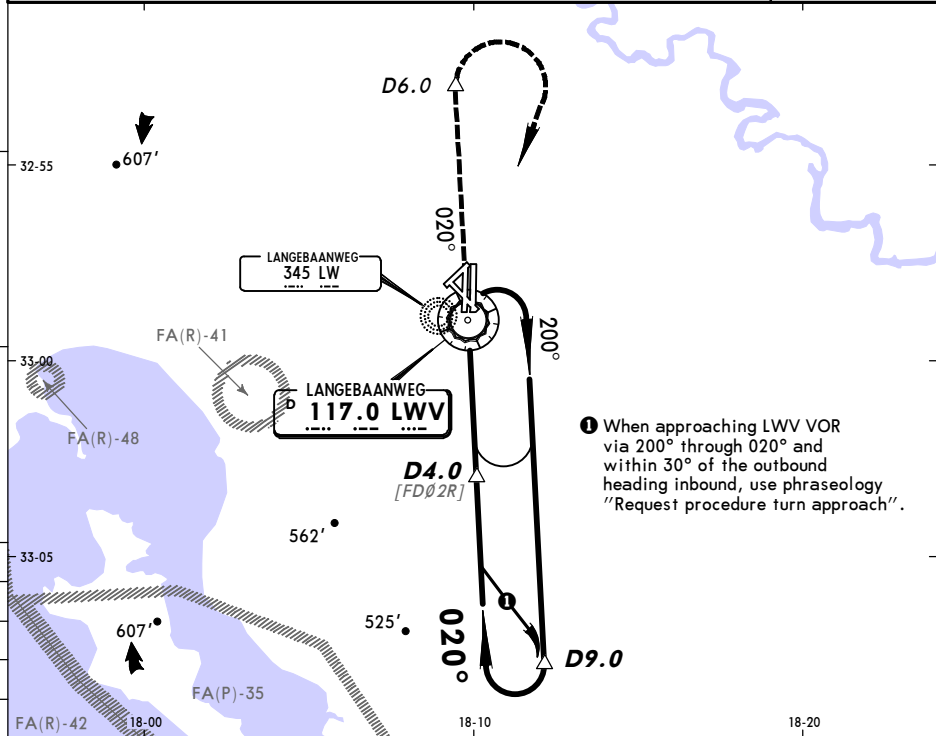
*ATIS 117.0		*LANGEBAAAN Approach (R) 122.5		*LANGEBAAAN Tower 128.8 120.8		*Ground 121.75
LOC LWI *108.9	Final Apch Crs 203°	GS 5.6 LWV 1466' (1364')	ILS DA(H) 302' (200')	Apt Elev 108'	RWY 102'	
MISSED APCH: Climb on R-205 outbound VOR to 4000'. At D6.0 LWV turn RIGHT to VOR and continue climb to 4000'.						
Alt Set: hPa Rwy Elev: 4 hPa Trans level: By ATC Trans alt: 5000'						MSA LWV VOR



Gnd speed-Kts	70	90	100	120	140	160	ALS PAPI PAPI		4000' on 117.0	LWV
GS	3.00°	372	478	531	637	743	849		R-205	

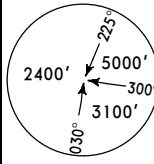
JAR-OPS		STRAIGHT-IN LANDING RWY 20L				CIRCLE-TO-LAND			
ILS		LOC (GS out)				ENTIRELY AT PILOTS DISCRETION			
DA(H) 302' (200')									
FULL		ALS out							
A									
B									
C	RVR 800m	RVR 1000m			NOT APPLICABLE				MINIMUMS NOT YET ESTABLISHED BY S AFR REP CAA
D									

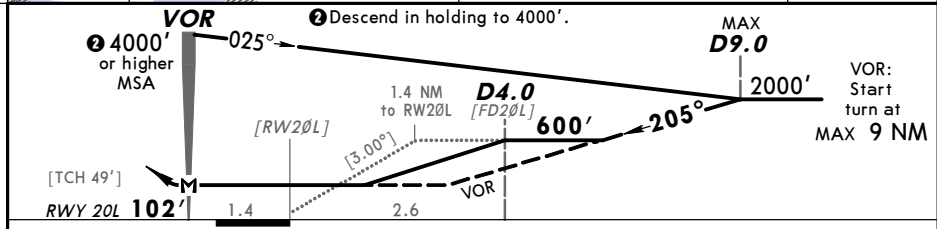
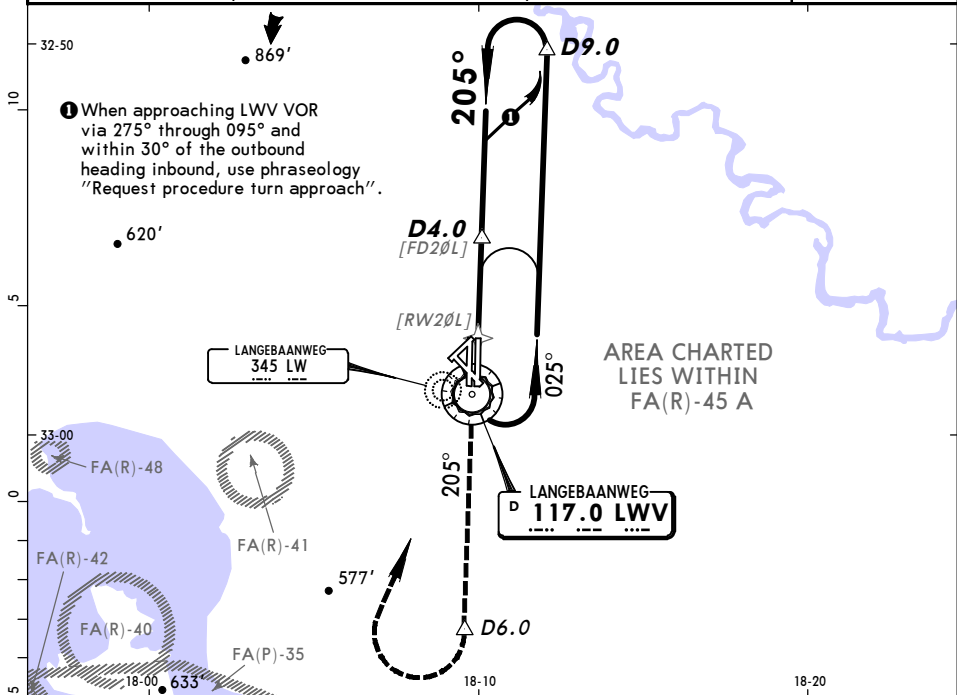
*ATIS 117.0		*LANGEBAAW Approach (R) 122.5		*LANGEBAAW Tower 128.8 120.8		*Ground 121.75
VOR LWV 117.0	Final Apch Crs 020°	Minimum Alt D4.0 1100' (992')	MDA(H) 490' (382')	Apt Elev 108'	RWY 108'	
MISSED APCH: Climb on R-020 outbound VOR to 4000'. At D6.0 turn RIGHT to VOR.						
Alt Set: hPa		Rwy Elev: 4 hPa	Trans level: By ATC		Trans alt: 5000'	MSA LWV VOR



Gnd speed-Kts	70	90	100	120	140	160	<div> <div>4000'</div> <div>↑</div> <div>on 117.0</div> </div>		LWV
Descent Angle 3.05°	378	486	540	648	755	863	<div> <div>PAPI</div> <div>PAPI</div> </div>		R-020
MAP at VOR									


JAR-OPS			STRAIGHT-IN LANDING RWY 02R			CIRCLE-TO-LAND		
			MDA(H) 490' (382')					
			ALS out			ENTIRELY AT PILOTS DISCRETION		
A	RVR 1200m		RVR 1500m			MINIMUMS NOT YET ESTABLISHED BY S AFR REP CAA		
B	RVR 1300m		RVR 1500m					
C	RVR 1400m		RVR 1800m					
D	RVR 1600m		RVR 2000m					

*ATIS 117.0		*LANGEBAAN Approach (R) 122.5		*LANGEBAAN Tower 128.8 120.8		*Ground 121.75	
VOR LWV 117.0	Final Apch Crs 205°	VOR DME Minimum Alt D4.0 600' (498')	VOR DME MDA(H) 490' (388')	Apt Elev 108' RWY 102'			
		VOR Minimum Alt No FAF	VOR MDA(H) 540' (438')				
MISSED APCH: Climb on R-205 outbound VOR to D6.0 (VOR: to 2100'), then turn RIGHT to VOR climbing to 4000'.							MSA LWV VOR
Alt Set: hPa		Rwy Elev: 3 hPa		Trans level: By ATC			
				Trans alt: 5000'			



Gnd speed-Kts	70	90	100	120	140	160	<div>ALS</div> <div>PAPI : PAPI</div> <div>⋮</div>	Refer to Missed Apch above
Descent angle [3.00°]	372	478	531	637	743	849		
MAP at VOR								

JAR-OPS		STRAIGHT-IN LANDING RWY 20L				CIRCLE-TO-LAND	
VOR DME			VOR			ENTIRELY AT PILOTS DISCRETION	
MDA(H) 490' (388')			MDA(H) 540' (438')				
ALS out			ALS out			MINIMUMS NOT YET ESTABLISHED BY S AFR REP CAA	
A	RVR 1300m	RVR 1500m	RVR 1300m	RVR 1500m			
B	RVR 1400m		RVR 1400m	RVR 1500m			
C	RVR 1600m	RVR 1800m	RVR 1600m	RVR 1800m			
D	RVR 1800m	RVR 2000m	RVR 1800m	RVR 2000m			

*ATIS 117.0		*LANGEBAAN Approach (R) 122.5		*LANGEBAAN Tower 128.8 120.8		*Ground 121.75	
NDB LW 345	Final Apch Crs 310°	With DME Minimum Alt D4.0 990' (882')	With DME MDA(H) 520' (412')	Apt Elev 108' RWY 108'			
		W/o DME Minimum Alt No FAF	W/o DME MDA(H) 990' (882')				
		MISSED APCH: Climb on 310° to 3000', then turn RIGHT to NDB climbing to 4000'.					
Alt Set: hPa		Rwy Elev: 4 hPa		Trans level: By ATC		Trans alt: 5000'	
MSA LW NDB							

