VFR	A	B	C	D	E	F	G
Separation between	NA	All	VFR & IFR	No Separation	No Separation	No Separation	No Seperation
ATS	NA	FCS	FCS for sep to IFR. V/V: TIS & TAG UR	FCS. TI of VFR. TAG UR	FIS & TIS WP	FIS	FIS
V-Restriction	NA	NIL	250kias ⇩FL100	250kias ⇩FL100	250kias ⇩FL100	250kias ⇩FL100	250kias ⇩FL100
Wx-minima	NA	⇧ FL100: 8 km. vis, 1000ft. over / under clouds - 1500m. horizontal ⇩ FL100: 5 km. vis, 1000ft. over / under clouds - 1500m. horizontal				⇩the higher of 3000ft. MSL / 1000ft. AGL & ⇩140kias: 3km. vis., clear of clouds & surface in sight	
Com	NA	2-way	2-way	2-way	None	None	None, except for TIA, TIZ
SSR	NA	A+C	Yes	No	No	No	No
Clear	NA	Yes	Yes	Yes	No	No	No

FCS: Flight Control Service | FIS: Flight Information Service | TAG: Traffic Avoidance Guidance
TI: Traffic Information | FGS: Flight Guidance Service | UR: Upon Request | WP: When Possible

IFR	A	B	C	D	E	F	G
Separation between	All	All	IFR & IFR, IFR & VFR	IFR & IFR	IFR & IFR	IFR & IFR WP	No sep
ATS	FCS	FCS	FCS	FCS, TI of VFR, TAG UR	FCS, TI of VFR WP	FIS & FGS	FIS
V-Restriction	None	None	None	250 ⇩FL100	250 ⇩FL100	250 ⇩FL100	250 ⇩FL100
Com	2-way	2-way	2-way	2-way	2-way	2-way	2-way
SSR	A+C	A+C	A+C	A+C	A+C	A+C	A+C
Clear	Yes	Yes	Yes	Yes	No	No	No

Aircraft Category	V_{at}	Range of Speeds for Initial approach	Range of Final Approach speeds	Max. Speed for Circling	Max Speed for Missed Approach	
					Intermediate	Final
A	< 91	90 / 150 (110*)	70 / 100	100	100	110
B	91 / 120	120 / 180 (140*)	85 / 130	135	130	150
C	121 / 140	160 / 240	115 / 160	180	160	240
D	141 / 165	185 / 250	130 / 185	205	185	265
E	166 / 210	185 / 250	155 / 230	240	230	275

* - Max speed for reversal and racetrack procedures

APPLICATION OF WEATHER FORECASTS (TAFs & TRENDs) IN THE PLANNING STAGE

	DESTINATION (ETA ± 1 HR)		T/O ALTERNATE (ETA ± 1 HR)		DEST ALTERNATE (ETA ± 1 HR)	
	Improvement	Deterioration	Improvement	Deterioration	Improvement	Deterioration
FM (alone), BECMG AT	- From the beginning of the change.		- Average wind must be within limits.		- Gusts can be disregarded.	
BECMG (alone), BECMG FM, BECMG TL, BECMG FM…TL	- Valid from the *end* of the period.	- Valid from the *beginning* of the period.	- Applicable except when showers.		- Gusts can be disregarded in all circumstances.	
TEMPO (alone), TEMPO FM, TEMPO TL, TEMPO FM…TL, PROB 30/40 (alone)	- Improvements to be disregarded. - Deterioration to be disregarded if showery type.		- Wind and gusts that exceed limits can be disregarded in showers. - Improvements shall be disregarded.		- Wind and gusts that exceed limits can be disregarded in showers. - Gusts can be disregarded in all circumstances.	
PROB TEMPO	**- Deterioration to be disregarded.**		**- Improvements shall be disregarded.**		- Can be disregarded.	

Aerodrome Temp C°	Values to be added by to minimum heights / altitudes - (Height above alt setting source)														
	200	300	400	500	600	700	800	900	1000	1500	2000	3000	4000	5000
0°	20	20	30	30	40	40	50	50	60	90	120	170	230	280
- 10°	20	30	40	50	60	70	80	90	100	150	200	290	390	490
- 20°	30	50	60	70	90	100	120	130	140	210	280	420	570	710
- 30°	40	60	80	110	120	140	150	170	190	280	380	570	760	950
- 40°	50	80	100	120	150	170	190	220	240	360	480	720	970	1210
- 50°	60	90	120	150	180	210	240	270	300	450	590	890	1190	1500

Function	0	10	20	30	40	50	60	70	80	90
Sine	0	0.173	0.342	0.500	0.642	0.766	0.866	0.939	0.984	1
Cosine	1	0.984	0.909	0.866	0.766	0.642	0.500	0.342	0.173	0
Tangent	0	0.176	0.363	0.577	0.839	1.191	1.732	2.747	5.671	- - - -
Sound speed	30°C	20°C	10°C	0°C	-10°C	-20°C	-30°C	-40°C	-50°C	-60°C
M/s	349,7	343,6	337,5	331,4	325,3	319,2	313,1	307	300,1	294,8
Km/hr	1252,9	1236,9	1215	1193	1171,1	1149,1	1127,2	1105,2	1080,4	1061,3
Knots	676,5	667,9	656	664,2	632,3	620,5	608,6	596,8	583,4	573,1
Bank	0°	10°	15°	25°	30°	45°	60°	70°	75°	89°
G-load	1	1,01	1,03	1,10	1,15	1,41	2	2,92	3,86	57,29
V_S increase	1	1	1,01	1,04	1,07	1,18	1,41	1,70	1,96	7,57

IFR to VFR

1. Obtain QNH from ATS.
2. Descent to min. safe altitude in accordance to ATC clearance.
3. When VMC below clouds; then cancel IFR.
4. Continue in accordance to Visual Flight Rules.

IFR Hot Stuff Vers. 1.0 MagiskeMads.dk april. 2006

Friction taken @ DER, Midpoint & Stop end

Measured or calculated coefficient		Estimated surface friction	
0.40 - and above	-	Good	(5)
0.36 - 0.39	-	Medium to good	(4)
0.30 - 0.35	-	Medium	(3)
0.26 - 0.29	-	Medium to poor	(2)
0.25 - and below	-	Poor	(1)
9	-	Unreliable	(9)

VALUES OF A GIVEN WINDSPEED

DIRECTION	X-WIND	HEADWIND
Wind 10° off:	17 % ⇨ 1 / 6	98% ⇨ 1 / 1
Wind 20° off:	34 % ⇨ 1 / 3	93 % ⇨ 7 / 8
Wind 30° off:	50 % ⇨ 1 / 2	86 % ⇨ 5 / 6
Wind 40° off:	64 % ⇨ 2 / 3	76 % ⇨ 3 / 4
Wind 50° off:	76 % ⇨ 3 / 4	64 % ⇨ 2 / 3
Wind 60° off:	86 % ⇨ 5 / 6	50 % ⇨ 1 / 2
Wind 70° off:	93 % ⇨ 7 / 8	34 % ⇨ 1 / 3
Wind 80° off:	98 % ⇨ 1 / 1	17 % ⇨ 1 / 6
Wind 90° off:	100 % ⇨ 1 / 1	0 % ⇨ 0

SVFR: only CTR in airspace D
- Lowest visibility **1, 5 km**.
- Lowest cloud cover **500** ft. AGL
- Clear of clouds and surface in sight

Airspace G:
- When established in the traffic circuit: Visibility down to 1,5 km.

WEATHER SIGNATURE DECODER

MI	-	Shallow	BL	-	Blowing
BC	-	Patches	SH	⩒	Showers
PR	-	Partial	FZ	-	Freezing
DR	-	Drifting	TS	↯	Thunderstorm
DZ	⁾	Drizzle	IC	-	Ice Crystals
RA	●	Rain	PL	▪	Ice Pellets
SN	✳	Snow	GR		Hail
SG	⁾	Snowgrains	GS	-	Small hail/snow pellets
BR	≡	Mist	DU	-	Widespread dust
FG	≡	Fog	SA	-	Sand
FU	-	Smoke	HZ	∞	Haze
VA	-	Volcanic ash	PO	-	Dust / sand whirls
SQ	▽	Squalls	DS	⸗	Dust storm
FC	⌇	Funnel cloud	SS	⸗	Sandstorm

SNOWTAM / MOTNE DECODER

D_R D_R Runway designator

- Runway designator is expressed by 2 digits. If parallel runways: the runway to the Right has 50 added to the digit: ***Ex. 22R will be shown as 72***.
- **88** indicates "All runways". - **99** indicates that no new info is available.

E_R Runway deposits (snow, ice, slush, water or drifts)

0: Clear and Dry, **1**: Damp, **2**: Wet or Water patches, **3**: Rime or frost covered (depth normally less than 1 mm.), **4**: Dry snow, **5**: Wet snow, **6**: Slush, **7**: Ice, **8**: Compacted or rolled snow, **9**: Frozen ruts or ridges, **/**: Deposit type not reported.

C_R Extent of runway contamination

1: Less than 10% of runway covered, **2**: 11% to 25% of runway covered, **5**: 26% to 50% of runway covered, **9**: 51% to 100% of runway covered, **/**: Not reported.

e_R e_R Depth of deposit - average depth or highest if very significant

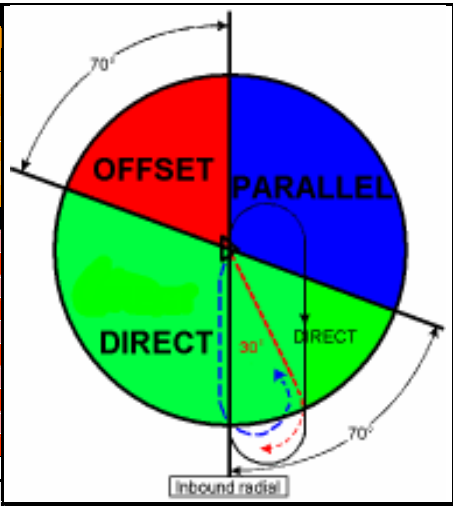
00: less than 1 mm, **01**: 1 mm, **02**: 2 mm, *etc.*, **10**: 10 mm, ***up to 90 mm! Thereafter*** **92**: 10 cm, **93**: 15 cm, **94**: 20 cm, **95**: 25 cm, **96**: 30 cm, **97**: 35 cm, **98**: 40 cm or more, **99**: Runways non-operational due to snow, slush, ice, drifts or clearance is in progress. Depth not reported, **//**: Depth of deposit not measurable but of no operational significance.

B_R B_R Friction coefficient or braking action

Either: **28**: Friction coefficient = .28, **35**: Friction coefficient = .35. etc. ***OR*** *Braking Action*: **95**: good, **94**: medium to good, **93**: medium, **92**: medium to poor, **91**: poor, **99**: unreliable. **//**: Breaking action not reported.

Notes: 1. If friction coefficient is below .40 the lowest value is reported otherwise the mean level is issued.
2. 99 - is used when the measuring equipment gives unreliable values due to wet or loose snow or slush.
3. // - is reported if the breaking action cannot be reported (e.g. due to WIP, Runway not-operational, runway conditions not available due to airport closure, etc.)

Example: 725545*92* means:
"Runway 22R is contaminated by wet snow that covers between 26% and 50% of the runway.
Depth is 45 mm and breaking action is medium to poor."



Actual heading minus inbound radial:

Answer between:	360 and 110	Parallel entry
Answer between:	110 and 290	Direct entry
Answer between:	290 and 360	Offset entry

The data above applies to RIGHTHAND holdings only

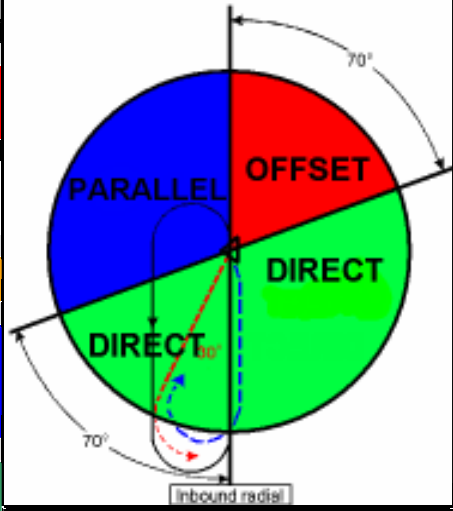
Remember to subtract from 360 if answer is negative

5 degrees flexibility on either side of sector boundaries

The data below applies to LEFTHAND holdings only

Answer between:	250 and 360	Parallel entry
Answer between:	070 and 250	Direct entry
Answer between:	360 and 070	Offset entry

Actual heading minus inbound radial:



HOLDINGS & APPROACH

Obstacle clearance in the holding area:	984 ft.
Over mountainous areas or high terrain over 2000 ft:	1969 ft.

0 - 1 NM	1 - 2 NM	2 - 3 NM	3 - 4 NM	4 - 5 NM
984 ft.	492 ft.	394 ft.	295 ft.	197 ft.

Arrival segment:	Min 984 ft obst. clr.
Initial Approach segment:	Min. 984 ft. obst. clr.
Intermediate Approach segment:	redu from 984 ft. to 492 ft.
Final approach segment:	492 ft. to 0 ft.
Missed approach segment:	S.O.C to above 131 ft

DME out on ILS:	Altitude in feet
	300
Alt in feet on ILS:	DME x 300
ROD on 3° GP:	Groundspeed x 10 / 2

Altitude increase in mountainous areas

Wind speed	!!Rule of thumb only!!
31 - 40 kts:	Increase altitude by 500 ft.
41 - 50 kts:	Increase altitude by 1000 ft.
51 - 60 kts:	Increase altitude by 1500 ft.
Above 60 kts:	Increase altitude by 2000 ft.

DP when DME available

MDH / 300 = Distance from TDZ to leave on a 3 degree glide slope

DP on a timed approach

MDH / 10 = Seconds to be **subtracted** from timing to Mapt.

ROD on GP if other than 3°:

GP (angle) x SF x 100 = ROD (ft. / min)

Dist point A to PET:	Distance A ⇨ B x GS return
	GS Proceed + GS return
Time to PET:	Dist point A to PET
	GS proceed / 60

RADIOFAILURE PROCEDURE

1. If VMC: Continue as such and land at nearest suitable AD. RDO prescribed or not.
2. For 20 minutes after trying to establish radio communication over mandatory reporting point; maintain latest cleared heading and altitude.
If MSA is higher: Then MSA, and then adjust flight according to filed flight plan.
3. Continue according to filed flightplan route to navaid at destination.
Hold there until descent is initiated.
4. Commence descent overhead the above mentioned navaid, at the time that deviates the least from **either:**
The latest time the PIC has received and acknowledged or if not applicable.
The time that deviates the least from the current flightplan.
5. Perform a normal instrument approach as prescribed for the applicable navaid.
6. Land to the best of your intent within 30 minutes after ETA or valid flightplan.

Celsius to Fahrenheit
((Celsius * 2) minus 10%) + 32

Fahrenheit to Celsius
((Fahrenheit -32) / 2) plus 10%)

Feet to meter:
Feet x 0,304878

Meter to feet:
Meters x 3,281

Feet to inches:	Feet x 12
Gallon to liter:	Gallon x 3,785
Kilo to pound:	Kilo x 2,21
Avgas: 6,02 lbs / USG	0,71 kg / liter
JET A1: 6,84 lbs / USG	0,81 Kg / liter
1 hPa equals:	0,001 bar
1 bar equals:	14,504 PSI
1 PSI equals:	2,036 inch/hg @ 0° C
1 inch/Hg equals:	25,4 mm/Hg
1 mm/Hg equals:	1,333 hPa
1 hPa equals:	0,0295 inches of Hg
1 inch/ Hg equals:	33,863 hPa