

DSLR Set @ 30mm - 45° to the ground, Shutter: 1/1000 sec; Ground Speed: 90 kts (152 feet/second)

50% Track Overlap, 40% Strip Overlap

Altitude(AGL)	Lens View	Overlap	Time Interval
1000	800	200	04 sec
1500	1200	300	06 sec
2000	1600	400	08 sec
2500	2000	500	10 sec
3000	2400	600	12 sec
3500	2800	700	14 sec
4000	3200	800	16 sec
4500	3600	900	18 sec
5000	4000	1000	20 sec
5500	4400	1100	22 sec
6000	4800	1200	24 sec
6500	5200	1300	26 sec
7000	5600	1400	28 sec
7500	6000	1500	30 sec
8000	6400	1600	32 sec
8500	6800	1700	34 sec
9000	7200	1800	36 sec
9500	7600	1500	38 sec
10000	8000	2000	40 sec

**Digital Single Lens Reflex
Intervalometer Image Timing
45° Oblique Imaging to Target**

**AIRBORNE
PHOTOGRAPHER'S
OPERATING HANDBOOK**

**Advanced Digital Imagery
System**

CIVIL AIR PATROL

04 September 2014

Dennis Gauci/Michael Sullivan/Neil Malone (Rev 2.0 04-Sep-2014)

Conventions

Strip Images flown on a **latitude** course:
(i.e. west to east or east to west)

Minute	nautical mile	feet
0.1	0.1002	608
0.01	0.0100	061
0.001	0.0010	006

Strip Images flown on a **longitude** course:
(i.e. north to south or south to north)

Minute	nautical mile	feet
0.1	0.0792	481
0.01	0.0079	048
0.001	0.0008	005

Once initial entry Lat/Long, AGL altitude and focal length have been established, the following tables are to be used to set camera intervalometer for image overlap and offset for strip overlap

DSLR/Lens: Set @ **30mm** - 45° to the ground, Shutter: 1/1000 sec; Ground Speed: 90 kts (152 feet/second)

Latitude Course Heading
50% Track Overlap, 40% Strip Overlap

Alt (AGL)	Interval	Strip Offset (nm)	
1000	800	400	05 sec 0.0702
1500	1200	600	08 sec 0.1053
2000	1600	800	11 sec 0.1404
2500	2000	1000	13 sec 0.1755
3000	2400	1200	16 sec 0.2107
3500	2800	1400	18 sec 0.2458
4000	3200	1600	21 sec 0.2809
4500	3600	1800	24 sec 0.3160
5000	4000	2000	26 sec 0.3511
5500	4400	2200	29 sec 0.3932
6000	4800	2400	32 sec 0.4213
6500	5200	2600	34 sec 0.4564
7000	5600	2800	37 sec 0.4915
7500	6000	3000	39 sec 0.5266
8000	6400	3200	42 sec 0.5617
8500	6800	3400	45 sec 0.5968
9000	7200	3600	47 sec 0.6320
9500	7600	3500	50 sec 0.6671
10000	8000	4000	53 sec 0.7022

DSLR/Lens: Set @ **60mm** - 45° to the ground, Shutter:
1/1000 sec; Ground Speed: 90 kts (152 feet/second)

50% Track Overlap, 40% Strip Overlap				
Alt (AGL)	Lens	View Overlap	Interval	Strip Offset (nm)
1000	400	200	02 sec	0.0351
1500	600	300	03 sec	0.0257
2000	800	400	04 sec	0.0702
2500	1000	500	05 sec	0.0878
3000	1200	600	06 sec	0.1054
3500	1400	700	07 sec	0.1229
4000	1600	800	08 sec	0.1405
4500	1800	900	09 sec	0.1580
5000	2000	1000	10 sec	0.1756
5500	2200	1100	11 sec	0.1966
6000	2400	1200	12 sec	0.2107
6500	2600	1300	13 sec	0.2282
7000	2800	1400	14 sec	0.2458
7500	3000	1500	15 sec	0.2633
8000	3200	1600	16 sec	0.2809
8500	3400	1700	17 sec	0.2984
9000	3600	1800	18 sec	0.3160
9500	3800	1900	19 sec	0.3336
10000	4000	2000	20 sec	0.3511

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