A6M2 (0.05)
- 14 seconds (123mph), 122.3m
- 14 seconds (115mph), 114.5m
- 14 seconds (105mph), 104.6m

A6M5b (0.05)
- 15 seconds (130mph), 138.7m
- 14 seconds (125mph), 124.5m
- 15 seconds (108mph), 115.3m

Bf109E-4 (1.0/1.1/1.2)
- 17 seconds (152mph), 183.9m
- 18 seconds (138mph), 176.8m
- 18 seconds (118mph), 151.1m

Bf109F-4 (1.0/1.2/1.2)
- 16 seconds (162mph), 184.5m
- 18 seconds (146mph), 187.1m
- 18 seconds (138mph), 175.5m

Bf109G-2 (1.0/1.2/1.2)
- 17 seconds (167mph), 202.1m
- 18 seconds (160mph), 205.0m
- 17 seconds (148mph), 179.0m

Bf109G-6 (1.0/1.2/1.2)
MG151/20
- 18 seconds (163mph), 208.8m
- 18 seconds (160mph), 204.9m
- 18 seconds (134mph), 171.6m
MK108
- 18 seconds (168mph), 215.2m
- 19 seconds (158mph), 213.6m
- 18 seconds (137mph), 175.5m

Bf109G-10 (1.0/1.3/1.3)
MG151/20
- 18 seconds (176mph), 225.5m
- 19 seconds (163mph), 220.4m
- 19 seconds (142mph), 192.0m

MK108
- 18 seconds (179mph), 229.3m
- 19 seconds (167mph), 225.8m
- 19 seconds (149mph), 201.5m

Bf110C-4 (0.05)
- 20 seconds (139mph), 197.8m
- 19 seconds (119mph), 161.0m
- 16 seconds (100mph), 142.3m

Bf110G-2 (1.0)
- 22 seconds (145mph), 227.0m
- 22 seconds (131mph), 205.1m
- 20 seconds (105mph), 149.5m

C.202 (0.05)
- 20 seconds (142mph), 202.1m
- 18 seconds (146mph), 187.0m
- 18 seconds (129mph), 165.2m

C.205 (1.0)
- 19 seconds (168mph), 227.2m
- 18 seconds (162mph), 207.5m
- 20 seconds (136mph), 193.6m

F4F-4 (0.05)
- 21 seconds (125mph), 186.8m
- 20 seconds (118mph), 167.9m
- 20 seconds (98mph), 139.5m

FM-2 (0.05)
- 18 seconds (133mph), 170.4m
- 16 seconds (129mph), 146.9m
- 18 seconds (100mph), 128.1m

F4U-1 (1.0)
- 20 seconds (154mph), 219.2m
- 21 seconds (138mph), 206.2m
- 20 seconds (106mph), 150.9m

F4U-1D (1.0)
- 19 seconds (160mph), 216.4m
- 19 seconds (149mph), 201.5m
- 19 seconds (110mph), 148.7m

F4U-1C (1.0)
- 21 seconds (162mph), 242.1m
- 20 seconds (150mph), 213.5m
- 20 seconds (110mph), 156.6m

F4U-4 (1.0)
- 19 seconds (168mph), 227.2m
- 18 seconds (162mph), 207.5m
- 18 seconds (113mph), 144.7m

F6F-5 (1.0)
- 20 seconds (160mph), 227.7m
- 19 seconds (145mph), 196.1m
- 19 seconds (118mph), 159.5m

Fw190A-5 (1.0/1.5)
- 21 seconds (180mph), 269.0m
- 21 seconds (162mph), 242.1m
- N/A

Fw190A-8 (1.0/1.5)
4xMG151/20
- 23 seconds (181mph), 296.3m
- 21 seconds (171mph), 255.6m
- N/A
2xMG151/20, 2xMK108
- 23 seconds (181mph), 296.3m
- 23 seconds (172mph), 281.6m
- N/A

Fw190D-9 (1.0/1.5)
- 22 seconds (181mph), 283.4m
- 21 seconds (172mph), 257.1m
- N/A

Fw190F-8 (1.0/1.5)
- 23 seconds (179mph), 293.0m
- 22 seconds (171mph), 267.8m
- N/A

* Fw190s cannot maintain a turn tight/slow enough for full flaps

Hurricane Mk.Ia (0.05)
- 15 seconds (126mph), 134.5m
- N/A
- 15 seconds (104mph), 111.0m

Hurricane Mk.IIc (0.05)
- 15 seconds (136mph), 145.2m
- N/A
- 15 seconds (116mph), 123.8m

Hurricane Mk.IId (0.05)
- 16 seconds (146mph), 166.2m
- N/A
- 17 seconds (116mph), 140.3m

* Hurricanes and Spitfires have only landing flap positions available

Ki-61-I-Tei (0.05)
- 18 seconds (151mph), 193.4m
- 18 seconds (146mph), 187.0m
- 19 seconds (131mph), 177.1m

Ki-84-I-Ko (0.05)
- 17 seconds (153mph), 185.1m
- 17 seconds (130mph), 157.3m
- 16 seconds (117mph), 133.2m

La-5FN (0.05)
- 18 seconds (156mph), 199.8m
- 17 seconds (150mph), 181.5m
- 17 seconds (126mph), 152.4m

La-7 (0.05)
ShVAK
- 18 seconds (162mph), 207.5m
- 18 seconds (153mph), 196.0m
- 17 seconds (127mph), 153.6m
B-20
- 18 seconds (162mph), 207.5m
- 17 seconds (151mph), 182.7m
- 17 seconds (126mph), 152.4m

Me163B (0.05)
- 17 seconds (210mph), 254.1m
- 17 seconds (196mph), 237.1m
- N/A

* Me163B flies too fast at full throttle turn, for full flaps to be used

Me262A (0.05)
- 27 seconds (204mph), 392.0m
- 28 seconds (190mph), 378.7m
- 31 seconds (153mph), 359.6m

Mosquito Mk.VI (0.05)
- 21 seconds (149mph), 222.7m
- 18 seconds (140mph), 179.3m
- 20 seconds (118mph), 167.9m

N1K2-J (0.05)
- 17 seconds (167mph), 202.0m
- 16 seconds (153mph), 174.2m
- 15 seconds (134mph), 143.0m

P-38G (0.05)
- 19 seconds (174mph), 235.3m
- 20 seconds (157mph), 223.5m
- 18 seconds (116mph), 148.6m

P-38J (0.05)
- 21 seconds (180mph), 269.0m
- 19 seconds (170mph), 229.9m
- 19 seconds (116mph), 156.8m

P-38L (0.05)
- 21 seconds (184mph), 275.0m
- 19 seconds (169mph), 228.5m
- 19 seconds (119mph), 160.9m

P-40B (1.0)
- 21 seconds (139mph), 207.7m
- 21 seconds (131mph), 195.8m
- 21 seconds (112mph), 167.4m

P-40E (1.0)
- 19 seconds (154mph), 208.2m
- 19 seconds (140mph), 189.3m
- 19 seconds (124mph), 167.7m

P-47D-11 (0.05)
- 24 seconds, (149mph), 254.5m (+4.0)
- 23 seconds, (137mph), 224.3m (+1.7)
- 23 seconds, (119mph), 194.8m (+6.9)

P-47D-25 (0.05)
- 24 seconds, (158mph), 269.9m (+12.9)
- 23 seconds, (147mph), 240.6m (+6.5)
- 25 seconds, (115mph), 204.6m (+8.2)

P-47D-40 (0.05)
- 24 seconds, (155mph), 264.8m (-6.8)
- 22 seconds, (148mph), 231.7m (-4.7)
- 25 seconds, (117mph), 208.2m (+5.2)

P-47N (0.05)
75%
- 25 seconds, (155mph), 275.8m
- 23 seconds, (147mph), 240.6m

- 27 seconds, (116mph), 222.9m
25%
- 22 seconds, (157mph), 245.8m
- 21 seconds, (147mph), 219.7m
- 23 seconds, (114mph), 186.6m

* New plane
* P-47N was specially tested with 25% fuel as well

P-51B (0.05)
- 21 seconds, (159mph), 237.6m (-6.3)
- 19 seconds, (145mph), 196.1m (-17.6)
- 22 seconds, (119mph), 186.3m (-6.8)

P-51D (0.05)
- 21 seconds, (166mph), 248.1m (-10.5)
- 20 seconds, (152mph), 216.4m (-8.8)
- 21 seconds, (125mph), 186.8m (-2.6)

Spitfire Mk.Ia (0.05)
- 17 seconds (117mph), 141.5m
- N/A
- 17 seconds (97mph) , 117.3m

Spitfire Mk.V
- 16 seconds (137mph), 156.0m
- N/A
- 17 seconds (105mph), 134.5m

Seafire Mk.II (0.05)
- 16 seconds (140mph), 159.4m
- N/A
- 18 seconds (106mph), 135.8m

Spitfire Mk.IX (0.05)
30cal
- 16 seconds (144mph), 164.0m
- N/A
- 16 seconds (118mph), 134.3m
50cal

- 17 seconds (141mph), 170.6m
- N/A
- 17 seconds (121mph), 146.4m

Spitfire Mk.XIV (0.05)
30cal
- 16 seconds (165mph), 187.9m
- N/A
- 18 seconds (119mph), 152.4m
50cal
- 17 seconds (166mph), 200.8m
- N/A
- 18 seconds (118mph), 151.1m

Ta152H-1 (1.0)
- 20 seconds (184mph), 261.9m
- 20 seconds (173mph), 246.2m
- N/A

* Ta152 cannot maintain a turn tight/slow enough for full flaps

Typhoon Mk.Ib (0.05)
- 20 seconds (163mph), 232.0m
- N/A
- N/A

Tempest Mk.V (0.05)
- 18 seconds (168mph), 215.2m
- N/A
- N/A

*Typhoon and Tempest flies too fast at full throttle turn, for flaps to be used

Yak-9T (0.05)
- 20 seconds (144mph), 205.0m
- 19 seconds (132mph), 178.5m
- 19 seconds (116mph), 156.8m

Yak-9U (0.05m)
- 19 seconds (152mph), 205.5m

- 18 seconds (144mph), 184.5m
- 19 seconds (129mph), 174.4m

Flaps: None

Type:	Radius
A6M2:	122.3m
Hurricane Mk.I:	134.5m
A6M5:	138.7m
Spitfire Mk.I:	141.5m
Hurricane Mk.IIc:	145.2m
Spitfire Mk.V:	156.0m
Seafire Mk.II:	159.4m
Spitfire Mk.IX:	164.0m
Hurricane Mk.IId:	166.2m
FM-2:	170.4m
Spitfire Mk.IX(50cal):	170.6m
Bf109E-4:	183.9m
Bf109F-4:	184.5m
Ki-84-I-Ko (0.05):	185.1m
F4F-4:	186.8m
Spitfire Mk.XIV:	187.9m
Ki-61-I-Tei:	193.4m
Bf110C-4:	197.8m
La-5FN:	199.8m
Spitfire Mk.XIV(50cal):	200.8m
N1K2-J:	202.0m
Bf109G-2:	202.1m
C.202:	202.1m
Yak-9T:	205.0m
Yak-9U:	205.5m
La-7:	207.5m
La-7(3x20mm):	207.5m
P-40B (1.0):	207.7m
P-40E:	208.2m
Bf109G-6:	208.8m
Bf109G-6(30mm):	215.2m
Tempest Mk.V:	215.2m
F4U-1D:	216.4m
F4U-1:	219.2m
Mosquito Mk.VI:	222.7m
Bf109G-10:	225.5m
Bf110G-2:	227.0m
C.205:	227.2m
F4U-4:	227.2m
F6F-5:	227.7m

Bf109G-10(30mm):	229.3m
Typhoon Mk.Ib:	232.0m
P-38G:	235.3m
P-51B:	237.6m
F4U-1C:	242.1m
P-47N(25%):	245.8m
P-51D:	248.1m
Me163B:	254.1m
P-47D-11:	254.5m
Ta152H-1:	261.9m
P-47D-40:	264.8m
Fw190A-5:	269.0m
P-47D-25:	269.9m
P-38J:	269.0m
P-38L:	275.0m
P-47N(75%):	275.8m
Fw190D-9:	283.4m
Fw190F-8:	293.0m
Fw190A-8:	296.3m
Fw190A-8(30mm):	296.3m
Me262A:	392.0m

Flaps: 1 notch

Type:	Radius
A6M2:	114.5m
A6M5:	124.5m
*Hurricane Mk.I:	134.5m
*Spitfire Mk.I:	141.5m
*Hurricane Mk.IIc:	145.2m
FM-2:	146.9m
*Spitfire Mk.V:	156.0m
Ki-84-I-Ko:	157.3m
*Seafire Mk.II	159.4m
Bf110C-4:	161.0m
*Spitfire Mk.IX:	164.0m
*Hurricane Mk.IId:	166.2m
F4F-4:	167.9m
*Spitfire Mk.IX(50cal):	170.6m
N1K2-J:	174.2m
Bf109E-4:	176.8m
Yak-9T:	178.5m
Mosquito Mk.VI:	179.3m
La-5FN:	181.5m
La-7(3x20mm):	182.7m

Yak-9U:	184.5m
C.202:	187.0m
Ki-61-I-Tei:	187.0m
Bf109F-4:	187.1m
*Spitfire Mk.XIV:	187.9m
P-40E:	189.3m
P-40B:	195.8m
La-7:	196.0m
F6F-5:	196.1m
P-51B:	196.1m
*Spitfire Mk.XIV(50cal):	200.8m
F4U-1D:	201.5m
Bf109G-6:	204.9m
Bf109G-2:	205.0m
Bf110G-2:	205.1m
F4U-1:	206.2m
C.205:	207.5m
F4U-4:	207.5m
F4U-1C:	213.5m
Bf109G-6(30mm):	213.6m
P-51D:	216.4m
*Tempest Mk.V:	215.2m
P-47N(25%):	219.7m
Bf109G-10:	220.4m
P-38G:	223.5m
P-47D-11:	224.3m
Bf109G-10(30mm):	225.8m
P-38L:	228.5m
P-38J:	229.9m
P-47D-40:	231.7m
*Typhoon Mk.Ib:	232.0m
Me163B:	237.1m
P-47D-25:	240.6m
P-47N(75%):	240.6m
Fw190A-5:	242.1m
Ta152H-1:	246.2m
Fw190A-8:	255.6m
Fw190D-9:	257.1m
Fw190F-8:	267.8m
Fw190A-8(30mm):	281.6m
Me262A:	378.7m

Flaps: Full

Type:	Radius
A6M2:	104.6m
Hurricane Mk.I:	111.0m
A6M5:	115.3m
Spitfire Mk.I:	117.3m
Hurricane Mk.IIc:	123.8m
FM-2:	128.1m
Ki-84-I-Ko:	133.2m
Spitfire Mk.IX:	134.3m
Spitfire Mk.V:	134.5m
Seafire Mk.II:	135.8m
F4F-4:	139.5m
Hurricane Mk.IId:	140.3m
Bf110C-4:	142.3m
N1K2-J:	143.0m
F4U-4:	144.7m
Spitfire Mk.IX(50cal):	146.4m
P-38G:	148.6m
F4U-1D:	148.7m
Bf110G-2:	149.5m
F4U-1:	150.9m
Bf109E-4:	151.1m
Spitfire Mk.XIV(50cal):	151.1m
Spitfire Mk.XIV:	152.4m
La-5FN	152.4m
La-7(3x20mm):	152.4m
La-7:	153.6m
F4U-1C:	156.6m
P-38J:	156.8m
Yak-9T:	156.8m
F6F-5:	159.5m
P-38L:	160.9m
C.202:	165.2m
P-40B:	167.4m
P-40E:	167.7m
Mosquito Mk.VI:	167.9m
Bf109F-4:	175.5m
Bf109G-6:	171.6m
Yak-9U:	174.4m
Bf109G-6(30mm):	175.5m
Ki-61-I-Tei:	177.1m
Bf109G-2:	179.0m
P-51B:	186.3m

P-47N(25%):	186.6m
P-51D:	186.8m
Bf109G-10:	192.0m
C.205:	193.6m
P-47D-11:	194.8m
Bf109G-10(30mm):	201.5m
P-47D-25:	204.6m
P-47D-40:	208.2m
*Tempest Mk.V:	215.2m
P-47N(75%):	222.9m
*Typhoon Mk.Ib:	232.0m
*Me163B:	237.1m
*Fw190A-5:	242.1m
*Ta152H-1:	246.2m
*Fw190A-8:	255.6m
*Fw190D-9:	257.1m
*Fw190F-8:	267.8m
*Fw190A-8(30mm):	281.6m
Me262A:	359.6m

Testing Parameters

Weapons/Ammunition
1. Standard weapons loadout was preferred
2. For planes with multiple choice of armament loadouts, the most preferred loadout was tested
(ie. 20mm options on the C.205)
3. Planes with alternate standard loadouts were tested accordingly
(ie. Bf109G with 20mms and 30mms were tested separately)
4. For planes with different ammunition options, the most preferred option was tested
(ie. 3400 rounds of M2 50cal for the P-47s)
5. External loadouts and rigs, were not used
(ie. rocket pods, gun pods, bomb racks)

Fuel
1. Fuel is set to 75% for all tested types
2. Individual fuel settings were not considered for the purpose of general comparisons for average
fighter performance. Therefore, some types have been slightly effected for worse.
(ie. The F4U-1 at 75% fuel, carries more fuel load than the F4U-1D at 75% fuel)

Throttle
1. Planes were tested at maximum possible throttle setting (WEP included)

Altitude
1. Test altitude is between 0~500ft
2. Variance in altitude during turns were contained to less than 100ft

Flaps
1. Turn performance was tested with;
   Flaps up, one notch, full flaps

Stall Limiter
1. Turn performance was tested with the Stall Limiter method, intended to minimizing human errors
   and disparities in individual skill level
2. Default SL angle is set to 0.05
3. For planes that cannot handle 0.05 due to various reasons (such as leading edge slats), an
   appropriate SL angle was used
4. Having gigher SL setting required for test, translates to the following fact:

  "The higher the SL angle required for testing, the higher the tendency to destabilize
   (particularly in the roll axis) when nearing the limits of performance."

Testing
1. All "fighter" class planes were tested
2. All planes were turned according to their favorable direction of turn
3. Tested area of performance is defined as follows;

   "Time required to turn one full circle (360 degrees), while maintaining
    tightest turn possible, at maximum throttle setting"

4. Therefore, this test does not address the differences in turn performances caused by
   alternate methods of turn control such as;

   1) using lower throttle settings
   2) using climbs/dives during turn
   3) using stalls to change plane
    ... etc.

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