

Aerofly Professional Deluxe AddOn 3 (True Scale AddOn)

Welcome to the AddOn 3 (Truescale AddOn) for the Aerofly Professional Deluxe simulator. With this Truescale AddOn you are adding to your Aerofly a total of 18 new models and 5 new photographic sceneries. Some of the models are offering new and interesting features and in some of the photographic sceneries you may change back and forth between different pilot positions. In this brief summary we are introducing to you the new models and sceneries. Almost all models in this AddOn have been created in 1:1 scale and reflect the flight data of the real aircrafts, i.e. size, speed, maneuverability and flight characteristics are virtually identical to the originals.

Installation tip: This AddOn will automatically locate an Aerofly Professional Deluxe installation. Therefore make sure before installing the AddOn 3, that an Aerofly Professional Deluxe version later than version 1.8. is installed. Please be aware, that the installation (only if a version is older than 1.8.0.21 is installed) will overwrite the configuration files as well as the calibration and channel assignments. Therefore you will have to recalibrate your input device. Unfortunately this step is necessary to be able to update also files of older versions.

Important: If you have installed additional models and sceneries from the internet, which may have the same names as in this AddOn, they will be overwritten. In rare cases it may come to conflicts. In such a case we recommend to reinstall Aerofly Professional Deluxe from the original CD in the sequence AddOn 1 – AddOn 2 (StarFlight) – AddOn 3 and than reinstall the models and sceneries from the internet. This way you will avoid possible conflicts.

Description of the Sceneries

This AddOn 3 contains 5 new photographic sceneries. These sceneries are all real airports to allow you realistic take offs and landings with the true scale models. As an absolute worldwide first the sceneries Hahnweide and Jesenwang are offering alternating pilot positions which you may change back and forth during the simulation. At the Jesenwang airport you may select between tower view and a position directly next to the runway and at the Hahnweide even between 3 different positions. To switch between the different positions at Hahnweide and Jesenwang just press Page Up and Page Down on your keyboard during simulation or click at the eye symbol inserted on the screen as soon as you look into the corresponding direction. In order not to disturb you with the eye symbol during flight, it will automatically fade out after a few seconds. To make it reappear, simply move your mouse. Now the brief descriptions of the sceneries:

Hahnweide

Hahnweide is a small private airport near Stuttgart, Germany. It features a long grass runway and a shorter asphalt runway. In our simulator you may choose between 3 different pilot positions: first there is a position directly next to the tower. From here you have a good overview at the entire airport. Another position is right next to the grass runway and a third position is next to the asphalt runway. The grass runway is long enough for take-offs and landings with any of the models of this AddOn, but the Spitfire and the GeeBee R2 will require some practicing.

Jesenwang

This private airport located near Munich, Germany is offering a great asphalt runway and is suitable for most of the AddOn models. In Jesenwang you may select between a tower view and a position right next to the runway.

Unterwössen

Unterwoessen is located in Bavaria, Germany right at the beginning of the alpine mountains and features a beautiful and long asphalt runway. Due to the valley location landings are a bit more complicated, but you will be successful with some practice even with the included true scale models.

Hammelburg

This private airport located in the utmost North West of Bavaria is one of the oldest airports of the area. The asphalt runway cannot be seen completely making landings a little tricky. Especially the models Spitfire and GeeBee R2 require some feeling.

Eschenlohe

This is a most beautiful glider airport close to the nature preserve of the Murnauer Moos and the northern Bavarian Alps. Due to the narrow runway take-offs and landings are not quite so easy with the giant models. But this makes this place ideal to hone your take-off and landing skill.

Aircraft Data and Descriptions

Antonow An-2

The AN-2 is the world's largest single engine biplane and a multi-task aircraft of the Warsaw Pact Countries. It can take off and land at extremely short and unprepared fields. It was used as private and military transport aircraft to drop off parachutists, observation of fishing swarms, weather reconnaissance, glider towing, pest control as well as for fertilizing and seeding in farming and forestry. The An-2 is a design of the Russian engineer Oleg K. Antonow (1906-1984) and performed its maiden flight in 1947. It has been produced in large numbers in the USSR, Poland and China. Production exceeded 17,000 units, 60% of them were produced in Poland.

Manufacturer:	WSK, Poland, 1965
Wingspan:	18.2 m (61 ft)
Max. Take-Off Weight:	5,500 kg (12,222 lbs)
Traveling Speed:	200 km/h (124 mph)
Take-off Distance:	150-180 m (500 – 600 ft)
Engines:	9-cylinder radial engine ASch-612R
Take-off Power:	735 kW (1,000 hp)

The simulated An-2 has the scale ration of 1:1 and a flying weight of 4.4 tons. We recommend a landing speed of 120 km/h (75 mph). To open the door use the Sweep Wing function in the easy set up mode.

Banjo

The Banjo is a single-seat ultra-light glider of the Czech manufacturer Pro-Fe. The wings are of braced wooden construction with a wingspan of 13.3 m (44 ft), the shell-type fuselage is made of glass fiber reinforced plastic. The low airplane weight of only 105 kg (233 lbs) allows for a payload of slightly over 100 kg (220 lbs). Its low price makes the Banjo an affordable entry into ultra-light soaring.

Manufacturer:	Pro-Fe, Czech Republic
Wingspan:	13.3 m (44 ft)
Max. Take-Off Weight:	220 kg (489 lbs)
Top Speed:	140 km/h (87 mph)
Best Glide Ratio:	28

Baron 58

The Beechcraft Baron of Beech Aircraft Corporation is a fast twin engine personal and business aircraft. Besides the pilot it can carry 5 passengers. Technically developed from the Beechcraft Bonanza it was introduced in 1961 and is still distributed by Beechcraft Corp., a subsidiary of Raytheon. There are two versions available: The Baron 55 (short fuselage) and the Baron 58 (long fuselage)

Wingspan/Length/Height:	11.5 m/8.5 m/2.9 m (38 ft/28 ft/10 ft)
Weight:	1468 – 2313 kg (3,262 – 5,140 lbs)
Top Speed:	370 km/h (230 mph)
Service Ceiling:	6,305 m (21,016 ft)
Landing Speed:	130 km/h (80 mph)
Max. Climb Rate:	516 m/min (1,720 ft/min)

Bf 109G-10 “Black 2”

The Messerschmidt Bf 109 was a German single-seat fighter plane in the thirties and forties. The G-10 version of 1943 was a significant improvement over the initial Bf 109. The Bf 109 G-10 is equipped with a DB605 engine with 1,085 kW (1,475 hp) and one of the fastest Bf 109 fighters ever built.

Wingspan/Length/Height:	9.97 m/8.95 m/2.6 m (33 ft/30 ft/9 ft)
Weight:	1970 – 3200 kg (4,378 lbs – 7,111 lbs)
Service Ceiling:	12,500 m (41,667 ft)
Top Speed:	640 km/h at 6,300 m altitude (398 mph at 21,000 ft)

Cap 10 (Mudry Cap 10)

The Mudry Cap 10, designed by Auguste Mudry (CAP stands for Cooperative des Ateliers Aeronautiques de la Region Parisienne, a cooperation of several small aircraft manufacturers in the wider Paris area in France) is a light weight aerobatic trainer aircraft. The French Air Force is using about 50 CAP 10B for their beginner training in aerobatics. The Mudry Cap 10 had its maiden flight in August of 1968. The wooden construction airplane evolved from the two-seater Fiel Emeraude. The development and testing of the Cap 10 was finished in September of 1970 and the aircraft went into production as Cap 10B. It was a big success from the very beginning. The French and foreign Air Forces were especially impressed by the ability to perform aerobatic maneuvers with G loads between + 6 and – 4.5. Open the Canopy with Wing Sweep function on easy Setup.

Wingspan/Length:	8.06 m/7.16 m (27 ft/24 ft)
Weight:	550 – 760 kg (1,222 lbs – 1,689 lbs)
Service Ceiling:	5,000 m (16,670 ft)
Top Speed:	270 km/h (167 mph)
Landing Speed:	120 km/h (75 mph)
Engine/Power:	Avco Lycoming AE10-360-B2F/135 kW (185 hp)

DG-100

The DG-100 was the first glider manufactured by Glaser Dirks (now DB Flugzeugbau GmbH) starting in 1973. The Standard Class DG-100 is completely built in glass fiber reinforced plastic and features a full-flying horizontal stabilizer. In addition the DG-100 features a two-piece canopy never again shown on any other DG airplane.

Wingspan/Length:	15 m/7 m (50 ft/23 ft)
Weight:	230 kg – 418 kg (511 lbs – 929 lbs)
Wing Area:	11.00 m ² (122 ft ²)
Aspect Ratio:	20.50
Top Speed:	260 km/h (162 mph)
Wing Loading:	28-38 kg/m ² (5.6-7.6 lbs/ft ²)
Glide Ratio:	39

Dromader (PZL-Mielec M 18 Dromader)

The M 18 is the ideal work horse (dromedary) for glider towing. PZL-Mielec developed and produced the PZL M 18 Dromader in cooperation with Rockwell International. First it was built in an agricultural version, powered by a strong Polish engine. This engine was so powerful, that it could have been used for an aircraft 40% heavier than the M 18. In 1974 the aircraft was converted into an even more powerful version. Its prototype performed the maiden flight in August 1976. Series production of the M-18 Dromader began in 1978. The Dromader became the biggest commercial success of Mielec. More than 700 aircrafts have been distributed into many countries all over the world. Most customers were in the US (192), followed by Germany (58), Cuba (46), Hungary (45), former Czechoslovakia (39) and Nicaragua (37). The simulator M-18 is designed in 50% scale with a wingspan of 25 ft and a weight of 103 kg (229 lbs). The door opens with Wing Sweep function in easy setup.

Wingspan/Length/Height:	17.7 m/9.47 m/3.70 m (58 ft/31 ft/ 12 ft)
Weight:	2,710 – 5,300 kg (5,975 – 11,700 lbs)
Top Speed:	256 km/h (160 mph)
Landing Speed:	109 km/h (68 mph)
Climb Rate:	414 m/min (1,380 ft/min)
Service Ceiling:	6,500 m (21.665 ft)

GeeBee R2

The GeeBee R models were developed in particular for air races and have been manufactured from 1932 on at Granville Brothers Aircraft. The name GeeBee refers to the initial of the manufacturer Granville Brothers. As the company was closed in 1933 there were only a total of 22 aircraft built. The GeeBee would have fallen into oblivion if it wasn't for Delmar Benjamin, who revived the aircraft by starting to build a replica in 1989. After about 6000 hours of work the replica of the GeeBee R2 was finished on December 23, 1991.

Wingspan:	7.67 m (25 ft, 6 in)
Weight:	912 kg (2,027 lbs)
Top Speed:	approx. 365 km/h (226 mph)
Landing Speed:	approx. 170 km/h (106 mph)

Junior (Boelkow Junior Bo 208)

The MBB Bo 209 "Junior" is a 2-seat light weight aircraft, which is even capable of aerobatics. The engine is the 100 hp RR O-200-A from Rolls-Royce, a 4-cylinder boxer engine. The Boelkow Junior is a licensed version of the MFI-9 Junior of Malmoe-Flyindustri (MFI) in Sweden. Their designer, Bjoern Andreasson introduced his BA-7 with 75 hp engine at the EAA Convention in 1958. The first Junior built at MBB flew in 1962. Germany built approx. 170 units and Sweden approx. 250 units. In the simulator you may open the canopy with the Wing Sweep function in easy setup.

Wingspan/Length:	8.00 m/5.80 m (26 ft/19 ft)
Weight:	380 kg (844 lbs)
Cruising Speed:	approx. 200 km/h (124 mph)

Fieseler Storch Fi 156 (also manufactured as Morane-Saulnier 505)

The Fieseler Fi 156 is a propeller driven aircraft, which flew first in 1936. It was developed and produced at the Gerhard-Fieseler-Werk in Kassel, Germany. With this design Fieseler won the government tender for a new type of liaison airplane in 1935. Series production started in 1937. The "Storch" (Stork) as it was nicknamed after its high legged fixed landing gear, was used during the entire WW II at all front lines as liaison, reconnaissance and ambulance aircraft. Its generously glassed cabin allowed excellent round view. The Fieseler "Storch" is well known because of its extreme short take off and landing (STOL) characteristics. The minimum flying speed was below 50 km/h (31 mph). For take-off with head wind 50 m (166 ft) and for landing 20 m (67 ft) were sufficient. Because of the high legged landing gear, the Storch was able to land on virtually any terrain. After WW II "Morane" in France produced another 925 Fi156 as MS 500 and MS 505 "Criquet" (Cricket).

Wingspan/Length/Height:	14.27 m/9.9 m/ 3 m (47.5 ft/33 ft/10 ft)
Top Speed:	175 km/h 108 mph)
Minimum Speed:	45 km/h (28 mph)
Service Ceiling:	4,600 m (15,330 ft)
Weight:	930 – 1320 kg (2,060 lbs – 2,930 lbs)

The simulator features the Morane 505 in 50% scale. It impresses with its exceptional slow speed flight characteristics also in the Aerofly Professional Deluxe and can land virtually anywhere.

NH-90 (NATO Multi-Purpose Helicopter)

The NH-90 is a European multi-purpose military helicopter. It is expected to become the backbone of the NATO helicopter fleet. The competing model is the somewhat older Sikorsky UH-60. For the first time in a European helicopter virtually all on board systems are controlled and monitored digitally. The control stick movements of the pilot are transmitted by four fold redundant fly-by-wire controls with automatic flight control. This way it also possible to fly the helicopter entirely computer controlled during forward flight and hovering without any manual input from the pilot. The simulator model features a number of additional functions. Open the door with Sweep Wing function in easy setup, control of tow hooks and rear hatch.

Rotor Diameter	16 m (53.3 ft)
Weight w/o mission equipment:	6,357 kg (14,125 lbs)
Service Ceiling:	6,000 m (20,000 ft)
Max. Cruising Speed:	305 km/h (189 mph)
Best Rotor RPM:	500 rpm

Piper J-3

The American Piper J-3 belongs to the airplane family of the Piper Cub and therefore to the classic trainer and sport aircrafts. Between 1931 and 1990 approx. 40.000 such planes have been produced. Over these decades it made a significant impact on general aviation. The design was started in 1931 at Taylor Aircraft Company, which in 1937 was taken over by Piper. During WW II the Piper J-3 was used by the US Forces as reconnaissance and liaison airplane.

Wingspan/Length/Height:	10.73 m/6.78 m/2.03 m (35.7 ft/22.6 ft/6.7 ft)
Weight:	330 – 550 kg (733 – 1,220 lbs)
Max. Cruising Speed:	140 km/h (87 mph)
Engine:	Continental A 65-8, 48 kW (65 hp)

Reiher (DFS Reiher)

In 1937 the Reiher (Heron) undoubtedly was the most advanced and most beautiful glider. Its designer, Hans Jacobs, proved with the Reiher, that performance increases are possible with superior aerodynamic design and without using larger wingspans. He chose the Goettingen 549 airfoil and turning into the Goettingen 676 from 60% of half wingspan.

Wingspan/Length:	19 m/7.3 m (63 ft/24 ft)
Weight with Pilot:	315 kg (700 lbs)
Max. Speed	200 km/h (124 mph)
Minimum Speed:	60 km/h (38 mph)
Glide Ratio:	33 (!)

Robinson R 22

The Robinson R22 is a well known helicopter of the Robinson Helicopter Company in Torrance, CA, USA. The concept parameters were a simple, light weight and cost efficient helicopter for training, surveillance and private use. The 2-seat R22 is the world's most popular entry level helicopter since 2 decades. It has been delivered to more than 60 countries around the globe. It also holds major performance records in its weight class including speed and distance.

Rotor Diameter:	7.68 m (25 ft, 7 in)
Length/Height:	8.75 m/2.70 m (29 ft, 2 in/9 ft)
Weight:	417 – 620 kg (930 – 1370 lbs)
Max. Airspeed:	189 km/h (117 mph)
Service Ceiling:	4,200 m (14,000 ft)
Engine:	Lycoming O-360 (145 hp) or O320 (160 hp)

The simulator model door can be opened with Wing Sweep function in easy setup. Optimum rotor speed is around 530 rpm.

Salto H101

Beginning of the seventies the Salto evolved from the Glasfluegel H-30 Standard Libelle glider. It was designed as a pure aerobatic glider by Ursula Haenle, the widow of former Glasfluegel director and designer Eugen Haenle. Compared with the Standard Libelle the Salto features a reduced wingspan, a V-tail and four flush-fitting air brakes positioned on the wing trailing edges. The very effective air brakes are hinged at their mid-points so that half the surface projects above the wing and half below. Fuselage was a sturdy all glass construction with a fixed wheel and a side opening canopy. The first prototype flew in 1971 and became since a rarity. The Salto is fully aerobatic with an impressive load range from + 7 G to – 5 G.

Manufacturer:	Start + Flug GmbH / Ursula Haenle
Wingspan/Length:	13.6 m (45 ft) / 5.95 m (20 ft)
Max. Weight:	280 kg (622 lbs)
Maximum Speed:	280 km/h (173 mph)
Best Glide Ratio:	34

Speed Canard

The Gyroflug SC01 Speed Canard (Gyroflug Ingenieurgesellschaft mbH) is a very fast 2-seat German sport aircraft made of glass fiber reinforced plastic. The fuselage actually is the front section of the Grob G 103 Twin Astir glider outfitted with a pusher engine. The winglets feature built-in rudders.

Wingspan/Length/Height: 7.7 m / 5.2 m / 1.9 m (25 ft 7 in / 17 ft 4 in / 6 ft 4 in)
Weight: max. 715 kg (1,580 lbs)
Top Speed: 360 km/h (223 mph)
Engine: Lycoming O-320D, 118 kW/160 hp

Spitfire MK9

The Supermarine Spitfire was a single-seat intercepting fighter used during WW II by the Royal Air Force and many of its Allies. The elliptical wing platform gives the Spitfire its characteristic appearance. The maiden flight took place on March 5, 1936 and its first commission was already in August 1938. Developed by the chief designer Reginald J. Mitchell (who died in 1937) and his successors, the Spitfire was very popular among pilots due to its high maneuverability. During WW II the Spitfire was flown at all front lines in many different versions. More than 20,300 Spitfires of all versions have been built by Supermarine and other companies. Some of them were on duty far into the fifties.

Wingspan/Length/Height: 11.23 m/9.12 m/3.86 m (37 ft 5 in/30 ft 5 in/12 ft 10 in)
Weight: 2,313 – 3,078 kg (5,140 – 6,840 lbs)
Engine: Rolls/Royce Merlin 45/ 1470 hp
Top Speed: 602 km/h at 4,000 m altitude (374 mph at 13,300 ft)
Service Ceiling: 11,280 m (37,600 ft)
Landing Speed: 130 – 150 km/h (81 – 94 mph)

The simulator model features a working canopy. It can be opened and closed with the Sweep Wing function on easy setup.

Tiger Moth (De Havilland DH.82 Tiger Moth)

The De Havilland DH.82 Tiger Moth was derived from the de Havilland Gipsy Moth. Geoffrey de Havilland designed this 1930 biplane. It was operated by the Royal Air Force and others as a primary trainer. In postwar use, surplus Tiger Moths were available for flying clubs and individuals. They proved to be inexpensive to operate and found enthusiastic reception in the civil market, taking on a variety of new roles including aerial advertiser, aerial ambulance, aerobatic performer, crop duster and glider tug. Quite a number are still flown at veteran meetings and air shows.

Wingspan/Length/Height: 8.9 m/7.29 m/2.68 m (29 ft 7 in/24 ft 4 in/ 8 ft 11 in)
Weight: 800 kg (1,778 lbs)
Top Speed: 175 km/h (108 mph)
Engine: De Havilland Gipsy Major 130 hp
Service Ceiling: 4,100 m (13,660 ft)