UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, D.C. 20591

In the matter of the petition of

SKYRUNNER, LLC

for an exemption from §§ 21.181(a)(3)(i), 21.190(a), 21.191(i)(3), 43.3(c), 43.7(g), 61.89(c)(1), 61.303(a), 61.315(a), 61.411(g), 61.415(a), 61.429(b), 65.107(b) and (c) of Title 14, Code of Federal Regulations (14 CFR)

Exemption No. 15422A
Regulatory Docket No. FAA-2015-8564

GRANT OF EXEMPTION

By letter dated March 6, 2017, Emanuel Anton, Lead Counsel for SkyRunner, LLC (SkyRunner), Polsinelli PC, 1401 Lawrence Street, Suite 2300, Denver, CO 80202, petitioned the Federal Aviation Administration (FAA) on behalf of SkyRunner for an exemption from §§ 21.181(a)(3)(i), 21.190(a), 21.191(i)(3), 43.3(c), 43.7(g), 61.89(c), 61.303(a), 61.315(a), 61.321, 61.325, 61.327(a), 61.411(g), 61.415, 61.419, 61.429(b), 65.107(b) and (c) of Title 14, Code of Federal Regulations (14 CFR). The proposed exemption, if granted, would allow the SkyRunner MK 3.2 powered parachute (PPC) aircraft to be designed, operated, and maintained under the regulations and standards applicable to aircraft issued a special airworthiness certificate in the special light-sport aircraft (SLSA) category with a maximum takeoff weight (MTOW) of 1,740 pounds.

To obtain the desired relief, the petitioner requires exemption from the following regulations:

> Section 21.181 prescribes, in pertinent part, that:
> (a) Unless sooner surrendered, suspended, revoked, or a termination date is otherwise established by the FAA, airworthiness certificates are effective as follows:
> (3) A special airworthiness certificate in the light-sport category is effective as long as—
> (i) The aircraft meets the definition of a light-sport aircraft.

Section 21.190 prescribes, in pertinent part, that:
(a) *Purpose.* The FAA issues a special airworthiness certificate in the light-sport category to operate a light-sport aircraft, other than a gyroplane.

Section 21.191 prescribes, in pertinent part, that:
Experimental certificates are issued for the following purposes:
(i) *Operating light-sport aircraft.* Operating a light-sport aircraft that—
(3) Has been previously issued a special airworthiness certificate in the light-sport category under § 21.190.

Section 43.3 prescribes in pertinent part, that:
(c) The holder of a repairman certificate may perform maintenance, preventive maintenance, and alterations as provided in part 65 of this chapter.

Section 43.7 prescribes in pertinent part, that:
(g) The holder of a repairman certificate (light-sport aircraft) with a maintenance rating may approve an aircraft issued a special airworthiness certificate in light-sport category for return to service, as provided in part 65 of this chapter.

Section 61.89 prescribes in pertinent part, that:
(c) A student pilot seeking a sport pilot certificate must comply with the provisions of paragraphs (a) and (b) of this section and may not act as pilot in command—
(1) Of an aircraft other than a light-sport aircraft.

Section 61.303 prescribes in pertinent part, that:
(a) Use the following table to determine what operating limits and endorsement requirements in this subpart, if any, apply to you when you operate a light-sport aircraft. The medical certificate specified in this table must be in compliance with § 61.2 in regards to currency and validity. If you hold a recreational pilot certificate, but not a medical certificate, you must comply with cross country requirements in § 61.101 (c), even if your flight does not exceed 50 nautical miles from your departure airport. You must also comply with requirements in other subparts of this part that apply to your certificate and the operation you conduct.

If you hold	And you hold	Then you may operate	And
(1) A medical certificate	(i) A sport pilot certificate,	(A) Any light-sport aircraft for which you hold the endorsements required for its category and class	(*1*) You must hold any other endorsements required by this subpart, and comply with the limitations in § 61.315.
	(ii) At least a recreational pilot certificate with a	(A) Any light-sport aircraft in that category and class,	(*1*) You do not have to hold any of the endorsements required by this subpart, nor do you have to

	category and class rating,		comply with the limitations in § 61.315.
	(iii) At least a recreational pilot certificate but not a rating for the category and class of light-sport aircraft you operate,	(A) That light-sport aircraft, only if you hold the endorsements required in § 61.321 for its category and class,	(*1*) You must comply with the limitations in § 61.315, except § 61.315(c)(14) and, if a private pilot or higher, § 61.315(c)(7).
(2) Only a U.S. driver's license	(i) A sport pilot certificate,	(A) Any light-sport aircraft for which you hold the endorsements required for its category and class.	(*1*) You must hold any other endorsements required by this subpart, and comply with the limitations in § 61.315.
	(ii) At least a recreational pilot certificate with a category and class rating,	(A) Any light-sport aircraft in that category and class,	(*1*) You do not have to hold any of the endorsements required by this subpart, but you must comply with the limitations in § 61.315.
	(iii) At least a recreational pilot certificate but not a rating for the category and class of light-sport aircraft you operate,	(A) That light-sport aircraft, only if you hold the endorsements required in § 61.321 for its category and class,	(*1*) You must comply with the limitations in § 61.315, except § 61.315(c)(14) and, if a private pilot or higher, § 61.315(c)(7).

Section 61.315 prescribes, in pertinent part, that:
(a) If you hold a sport pilot certificate you may act as pilot in command of a light-sport aircraft, except as specified in paragraph (c) of this section.

Section 61.321 states:
If you hold a sport pilot certificate and seek to operate an additional category or class of light-sport aircraft, you must—
(a) Receive a logbook endorsement from the authorized instructor who trained you on the applicable aeronautical knowledge areas specified in §61.309 and areas of operation specified in §61.311. The endorsement certifies you have met the aeronautical knowledge and flight proficiency requirements for the additional light-sport aircraft privilege you seek;
(b) Successfully complete a proficiency check from an authorized instructor other than the instructor who trained you on the aeronautical knowledge areas and areas of operation specified in §§61.309 and 61.311 for the additional light-sport aircraft privilege you seek;

(c) Complete an application for those privileges on a form and in a manner acceptable to the FAA and present this application to the authorized instructor who conducted the proficiency check specified in paragraph (b) of this section; and
(d) Receive a logbook endorsement from the instructor who conducted the proficiency check specified in paragraph (b) of this section certifying you are proficient in the applicable areas of operation and aeronautical knowledge areas, and that you are authorized for the additional category and class light-sport aircraft privilege.

Section 61.325 states:
If you hold a sport pilot certificate and seek privileges to operate a light-sport aircraft in Class B, C, or D airspace, at an airport located in Class B, C, or D airspace, or to, from, through, or at an airport having an operational control tower, you must receive and log ground and flight training. The authorized instructor who provides this training must provide a logbook endorsement that certifies you are proficient in the following aeronautical knowledge areas and areas of operation:
(a) The use of radios, communications, navigation system/facilities, and radar services.
(b) Operations at airports with an operating control tower to include three takeoffs and landings to a full stop, with each landing involving a flight in the traffic pattern, at an airport with an operating control tower.
(c) Applicable flight rules of part 91 of this chapter for operations in Class B, C, and D airspace and air traffic control clearances.

Section 61.327, states:
(a) Except as specified in paragraph (c) of this section, if you hold a sport pilot certificate and you seek to operate a light-sport aircraft that is an airplane with a V_H less than or equal to 87 knots CAS you must—
(1) Receive and log ground and flight training from an authorized instructor in an airplane that has a V_H less than or equal to 87 knots CAS; and
(2) Receive a logbook endorsement from the authorized instructor who provided the training specified in paragraph (a)(1) of this section certifying that you are proficient in the operation of light-sport aircraft that is an airplane with a V_H less than or equal to 87 knots CAS.
(b) If you hold a sport pilot certificate and you seek to operate a light-sport aircraft that has a V_H greater than 87 knots CAS you must—
(1) Receive and log ground and flight training from an authorized instructor in an aircraft that has a V_H greater than 87 knots CAS; and
(2) Receive a logbook endorsement from the authorized instructor who provided the training specified in paragraph (b)(1) of this section certifying that you are proficient in the operation of light-sport aircraft with a V_H greater than 87 knots CAS.
(c) The training and endorsements required by paragraph (a) of this section are not required if you have logged flight time as pilot in command of an airplane with a V_H less than or equal to 87 knots CAS prior to April 2, 2010.

Section 61.411 prescribes in pertinent part, that:
Use the following table to determine the experience you must have for each aircraft category and class:

If you are applying for a flight instructor certificate with a sport pilot rating for . . .	**Then you must log at least . . .**	**Which must include at least . . .**
(g) Powered-parachute category privileges,	(1) 100 hours of flight time as a pilot,	(i) 75 hours of flight time as pilot in command in powered aircraft, (ii) 50 hours of flight time in a powered parachute, (iii) 15 hours of cross-country flight time, (iv) 5 hours of cross-country flight time in a powered parachute, and (v) 15 hours of flight time as pilot in command in a powered parachute that is a light-sport aircraft.

Section 61.415 states in pertinent part, that:
If you hold a flight instructor certificate with a sport pilot rating, you may only provide flight training in a light-sport aircraft and are subject to the following limits:
(a) You may not provide ground or flight training in any aircraft for which you do not hold:
(1) A sport pilot certificate with applicable category and class privileges or a pilot certificate with the applicable category and class rating; and
(2) Applicable category and class privileges for your flight instructor certificate with a sport pilot rating.

Section 61.419 states:
If you hold a flight instructor certificate with a sport pilot rating and seek to provide training in an additional category or class of light-sport aircraft you must—
(a) Receive a logbook endorsement from the authorized instructor who trained you on the applicable areas of operation specified in §61.409 certifying you have met the aeronautical knowledge and flight proficiency requirements for the additional category and class flight instructor privilege you seek;
(b) Successfully complete a proficiency check from an authorized instructor other than the instructor who trained you on the areas specified in §61.409 for the additional category and class flight instructor privilege you seek;
(c) Complete an application for those privileges on a form and in a manner acceptable to the FAA and present this application to the authorized instructor who conducted the proficiency check specified in paragraph (b) of this section; and
(d) Receive a logbook endorsement from the instructor who conducted the proficiency check specified in paragraph (b) of this section certifying you are proficient in the

areas of operation and authorized for the additional category and class flight instructor privilege.

Section 61.429 states in pertinent part, that:
If you hold a flight instructor certificate, a commercial pilot certificate with an airship rating, or a commercial pilot certificate with a balloon rating issued under this part, and you seek to exercise the privileges of a flight instructor certificate with a sport pilot rating, you may do so without any further showing of proficiency, subject to the following limits:
(b) You must comply with the limits specified in § 61.415 and the recordkeeping requirements of § 61.423.

Section 65.107 states in pertinent part, that:
(b) The holder of a repairman certificate (light-sport aircraft) with an inspection rating may perform the annual condition inspection on a light-sport aircraft:
(1) That is owned by the holder;
(2) That has been issued an experimental certificate for operating a light-sport aircraft under § 21.191(i) of this chapter; and
(3) That is in the same class of light-sport-aircraft for which the holder has completed the training specified in paragraph (a)(2)(ii) of this section.
(c) The holder of a repairman certificate (light-sport aircraft) with a maintenance rating may—
(1) Approve and return to service an aircraft that has been issued a special airworthiness certificate in the light-sport category under § 21.190 of this chapter, or any part thereof, after performing or inspecting maintenance (to include the annual condition inspection and the 100-hour inspection required by § 91.327 of this chapter), preventive maintenance, or an alteration (excluding a major repair or a major alteration on a product produced under an FAA approval);
(2) Perform the annual condition inspection on a light-sport aircraft that has been issued an experimental certificate for operating a light-sport aircraft under § 21.191(i) of this chapter; and
(3) Only perform maintenance, preventive maintenance, and an alteration on a light-sport aircraft that is in the same class of light-sport aircraft for which the holder has completed the training specified in paragraph (a)(3)(ii) of this section. Before performing a major repair, the holder must complete additional training acceptable to the FAA and appropriate to the repair performed.

The petitioner supports its request with the following information:

The petitioner states that the SkyRunner MK 3.2 contains characteristics of a typical PPC. The complete aircraft consists of a cart, which includes two seats and an aircraft engine; a wing, which must be inflated and pressurized by ram air prior to each takeoff; and a propeller, which provides thrust during takeoff and continuing through all flight operations. The

SkyRunner MK 3.2 design differs from a typical PPC as it is uniquely developed to takeoff and land on rough and short fields.

The petitioner states that the SkyRunner MK 3.2 was designed and configured to expand a typical PPC zone of operations. The ideal departure area for a typical PPC is an open grassy area clear of debris and obstacles with a groomed, even surface. Furthermore, PPC's usually avoid taking off from both (i) rough fields which could potentially have holes, mud, rocks, dips in terrain, high grass, soft sand, snow, and other objects, and (ii) concrete and asphalt surfaces, as the structural integrity of the wing and suspension lines may be compromised during takeoffs and landings if the wing catches on the runway surface. The SkyRunner MK 3.2 was developed and configured to bring to market an aircraft capable of safely taking off and landing on these types of surfaces.

The petitioner states that the SkyRunner MK 3.2's expansion of a typical PPC's zone of operations was likely not contemplated when the light-sport aircraft (LSA) Final Rule was passed, as PPC technology has outpaced regulation in recent years. In fact, it was not until the FAA received comments to the LSA Proposed Rule that it became aware that design innovation and new use of existing technologies expanded a PPC's zone of operations to include water operations, leading the FAA to revise the Final Rule to include both PPC-land and PPC-sea class ratings. Similarly, and understandably, the FAA likely did not consider PPC designed and equipped to takeoff and land on rough and short fields, because no such technology existed. The SkyRunner MK 3.2 fills that void with a patent pending design that represents the next significant technological advance in powered parachute aviation.

The petitioner states that the unique design of the SkyRunner MK 3.2 allows for rough and short-field takeoffs and landings and provides additional safety features over typical PPC aircraft. Due to the design and safety requirements of an aircraft with very distinctive needs, the SkyRunner MK 3.2 inherently has a higher weight. Additional systems and equipment are necessary to provide both increased functionality and enhanced safety. For example, the SkyRunner MK 3.2 is fitted with anti-foreign object debris (FOD) guards and heavy-duty devices for increasing FOD resistance, allowing the SkyRunner MK 3.2 to depart from areas that are otherwise not safe for operation of typical PPC's. The additional systems and equipment and their associated weights, along with the other items that complete the total MTOW, are provided in the following:

Feature	Estimated Weight
A complete assisted ground roll system with independent power unit and transmission with differential and robust drive axles	288 lbs.
Chassis system including all components such as seats, instrumentation cluster, body panels, and safety harnesses	490 lbs.
Robust, active suspension	72 lbs.

Four wheel braking system	30 lbs.
Four robust wheels and off-road tires	152 lbs.
Rotax 914 UL engine	168 lbs.
Propeller and hub	10 lbs.
Wing	10 lbs.
Total Empty Weight:	**1,220 lbs.**
Two passengers (assuming each passenger weighs 189 lbs.)	378 lbs.
Two eight gallon fuel tanks, totaling sixteen gallons	128 lbs.
Baggage	14 lbs.
Requested Maximum Takeoff Weight	**1,740 lbs.**

The petitioner states that the increased weight is due to the SkyRunner MK 3.2's unique and distinguishable PPC design and operational features not found on typical PPC's. The FAA has previously granted exemptions to certificate and operate SLSA with unique functionality (see the Terrafugia Transition under Exemption Nos. 10072 and 16648 and the ITEC Maverick under Exemption No. 10299) and aircraft with innovative safety features (see the Icon Model A5 under Exemption No. 10829). In all instances, the aircraft exceeded the MTOW specified in 14 CFR § 1.1 due to the incorporation of either a distinguishable design or innovative operational safety features. This petition clearly requests similar relief.

The petitioner states that the unique design features a Rotax 914 UL aircraft engine (the Aircraft Engine), and a complete assisted ground roll system with an optional independent power unit and a transmission with differential and robust drive axles, which collectively act as an assisted power source during the takeoff ground roll (the Assisted Ground Roll System) to help kite the wing more quickly. The use of the Assisted Ground Roll System produces a much higher level of safety by increasing acceleration and decreasing the distance necessary during ground roll for kiting the wing, leading to a number of operational safety features as follows:

1. Increases safety during soft and rough-field takeoffs and landings.
2. Increases safety by increasing positive control on the ground.
3. Increases safety by decreasing risk of damage to the wing.
4. Increases safety by decreasing risk of damage caused by faulty lines.
5. Increases safety in the event of a roll-over.
6. Increases safety by decreasing wear and tear on all systems during takeoffs and landings.
7. Increases safety by enabling a softer landing and thereby decreasing the risk of hard landings and bouncing during touchdowns.
8. Increases safety during short-field takeoffs.
9. Increases safety by increasing performance during after-landing ground rolls, and particularly during short-field landings.
10. Increases safety during paved surface takeoffs.

The petitioner states that the use of the Assisted Ground Roll System produces a much higher level of safety because it addresses the primary takeoff performance factors— (1) the minimum takeoff distance is decreased, and (2) the wing gets overhead, centered, and ready to take the load of the cart much faster.

Time Test Results	Using only Aircraft Engine	Using Aircraft Engine Aided by Assisted Ground Roll System
How much time does it take from beginning of ground roll until the wing is inflated overhead?	6 seconds	4 seconds
Net Difference:	**2 seconds**	
How much time does it take from beginning of ground roll until wheels up?	26 seconds	17 seconds
Net Difference:	**9 seconds**	

Notably, the Assisted Ground Roll System increases timing performance from the beginning of ground roll to kiting of the wing by 33.33% and increases timing performance from beginning of ground roll to wheels up by 34.62%.

Distance Test Results	Using only Aircraft Engine	Using Aircraft Engine Aided by Assisted Ground Roll
How much distance is covered from beginning of ground roll until the wing is inflated overhead?	28 feet	20 feet
Net Difference:	**8 feet**	
How much distance is covered from beginning of takeoff ground roll until wheels up only the Aircraft Engine?	800 feet	600 feet
Net Difference:	**200 feet**	

The assisted ground roll system increases distance performance from the beginning of ground roll to kiting of the wing by 28.57% and increases distance performance from beginning of ground roll to wheels up by 25%.

The petitioner also states that it's important to understand that in the realm of powered parachute flight, additional weight under the wing improves the aircraft's high resistance to stall. So, from this perspective, the additional systems and equipment adding more weight to the SkyRunner MK 3.2 inherently make the aircraft safer during flight.

The petitioner states that the SkyRunner MK 3.2 is constructed from Chromoly seamless air-hardening heat-treated steel tubing bonded with carbon fiber composite to provide high levels of durability and performance. This lightweight, high-strength hybrid space frame protects passengers over the toughest of terrains and through the roughest of takeoffs and landings.

The petitioner states that while typical PPC ground steering is conducted with a steering bar connected to the nosewheel that moves left and right and some PPC's have a tiller device for ground steering, the SkyRunner MK 3.2 has a completely independent ground drive system that provides for increased positive control of the aircraft, which is particularly helpful during takeoffs, landings, and taxiing. Also, a typical PPC only has a rudimentary suspension system, whereas the SkyRunner MK 3.2's robust, active suspension decreases wear and tear on all systems during takeoffs and landings, decreases the risk of hard landings and bouncing during touchdowns, and assists with landing rolls particularly during rough-field landings.

The petitioner states that while optional equipment on some PPC's, the SkyRunner MK 3.2 distinguishable braking system is intended to provide increased runway incursion prevention and general safety. The SkyRunner MK 3.2's four wheel braking system assists during takeoffs by helping maintain positive control and acceleration, and assists in both rough-field and short-field landings. Moreover, while most PPC's have three wheels or a tri-cycle gear configuration, the SkyRunner MK 3.2's design configuration features four robust wheels and offers a selection of tires to accommodate variable, demanding terrain. From all-terrain to aggressive off-road tires, the options are uniquely suited for enhanced performance on ground surfaces and enhanced safety during rough field takeoffs and landings.

The petitioner states that all of the added equipment and use of the Assisted Ground Roll System undoubtedly provide dramatic safety improvements and increased utility. These benefits cannot be realized if the aircraft are not put into the hands of those who can benefit from them most—sport pilots. If there is concern that the SkyRunner MK 3.2 potentially exceeds the skill level of sport pilots, it should be noted that despite the addition of added equipment and the use of the Assisted Ground Roll System, the SkyRunner MK 3.2 still remains a simple-to-operate design. Importantly, the Assisted Ground Roll System is only used during the takeoff ground roll and never used in flight. Further, the use and maintenance of the Assisted Ground Roll System will be clearly defined in the Pilot Operating Manual and Aircraft Maintenance Manual.

The petitioner states that from a flight operations perspective, the SkyRunner MK 3.2's intuitive flight system makes the SkyRunner MK 3.2 one of the easiest and safest forms of

flight to master. In flight, the SkyRunner MK 3.2 has only two flight controls— left and right steering via handheld toggles and throttle handle to climb or descend. On the ground, the SkyRunner MK 3.2 is driven with a conventional steering wheel and gas and brake pedals. Notably, there is no retractable gear, no airbrakes/ spoilers, no variable pitch propeller, no mixture control, no carburetor heat, no cowl flaps, and no wing flaps. Due to the reduced control set, the SkyRunner MK 3.2 is even simpler to operate than many other LSA.

The petitioner states that in accordance with the FAA's objectives in the LSA Proposed Rule, allowing pilots to obtain logbook endorsements authorizing privileges, rather than obtaining ratings through flight tests with FAA personnel or designated examiners, would make the sport pilot certificate more affordable than a recreational pilot or a private pilot certificate. It also helps the FAA meet another of its stated objectives by helping to reduce the number of FAA aviation safety inspectors and FAA designated examiners needed to support airman certification. For these reasons, the petitioner is also seeking that this exemption allows sport pilots, students seeking sport pilot certificates, and flight instructors with a sport pilot rating to train in and operate these aircraft.

The petitioner states that in order to ensure the SkyRunner MK 3.2 can be kept in an airworthy condition in the cost-effective manner envisioned by the regulations governing SLSA products, the petitioner is seeking an exemption to ensure that the SkyRunner MK 3.2 can be maintained in the same manner as other SLSA. Furthermore, the incorporation of unique, more robust features do not add complexity to the maintenance and inspection aspects of the aircraft for repairmen or sport pilots beyond that of other aircraft issued a special airworthiness certificate in the light-sport category. This point is further bolstered by the fact that both the Terrafugia Transition and the Icon Model A5, both of which have an inherently more complex design than the SkyRunner MK 3.2, each received an exemption from 14 CFR 43.3(c), § 43.7(g), and § 65.107(b) and (c) (under Exemption Nos. 10829 and 16648 respectively) to allow holders of sport pilot certificates and repairman certificates (light-sport aircraft) with a maintenance rating or an inspection rating to perform maintenance and preventive maintenance on those respective aircraft.

The petitioner states that granting the exemption furthers the public interest on numerous levels. These diverse benefits will: (1) enhance general aviation (GA) utility and safety, (2) strengthen broader support for improved LSA designs, (3) spur the flagging PPC manufacturing industry, which has decreased steadily since 2010 by number of manufacturers, (4) inspire innovation while keeping the regulatory system from stifling ingenuity, (5) establish a key first step in the advancement of the value of personal aviation to the people of the United States by addressing the largest barriers to the more widespread use of GA for transportation, (6) provide economic benefit to the United States, (7) foster science, technology, engineering and mathematics (STEM) education and inspiration, and (8) allow the U.S. to lead the way into the future of transportation.

The petitioner concludes that granting this exemption is in accord with the original spirit of the light-sport rulemaking and serves safety, the GA industry, and the public good.

The FAA's analysis is as follows:

The FAA has determined that good cause exists for waiving the requirement for Federal Register publication because the exemption, if granted, would not set a precedent, and any delay in acting on this petition would be detrimental to SkyRunner.

The FAA has previously issued grants of exemption for similar circumstances to those presented in SkyRunner's petition, as follows:

1. In Grants of Exemption No. 10829 and Exemption No. 16648 (copies enclosed), the FAA granted ICON and Terrafugia:

    - additional weight exceeding that specified for a LSA allowing for the incorporation of safety features and operational design elements not found in other typical LSA;
    - operating privileges for sport pilot, student pilot, and flight instructor certificate with a sport pilot rating; and
    - performance of maintenance and preventive maintenance by holders of sport pilot certificates and repairman certificates (light-sport aircraft) with a maintenance rating or an inspection rating.

2. In Grants of Exemption No. 15422 and Exemption No. 10450 (copies enclosed), the FAA granted SkyRunner and ITEC a SLSA airworthiness certificate to be converted to experimental light-sport aircraft (ELSA) for operation in accordance with § 21.191(i)(3).

However, the grant of exemption to ICON was based on the unique incorporation of a spin resistant airframe with other safety-related design features and the decision was not intended to provide wider precedential value. In addition, the grant of exemption to Terrafugia was based on the incorporation of Federal Motor Vehicle Safety Standards (FMVSS)-based occupant protection and other "roadable" features included as part of the design.

The FAA has reviewed SkyRunner's request for an exemption to allow the SkyRunner MK 3.2 PPC to be designed, operated, and maintained under the regulations and standards applicable to aircraft issued a SLSA airworthiness certificate with a MTOW of 1,740 pounds. In conducting our review to determine whether granting the request would provide a level of safety at least equal to that provided by the rules or not adversely affect safety, and be in the public interest, we considered several factors. These factors include: the established safety continuum, the FAA's approach to regulatory oversight of light-sport aircraft, supporting information provided by SkyRunner, and similar exemptions previously granted to SkyRunner and other SLSA manufacturers.

The FAA has determined that the SkyRunner MK 3.2 design incorporates safety features that will permit the PPC to be certificated as a SLSA at a MTOW above that specified in the definition for LSA. These safety features include: (1) a complete assisted ground roll system

with independent power unit and transmission with differential and robust drive axles; (2) robust, active suspension; (3) four wheel braking system; and (4) four robust wheels and off-road tires. The FAA believes that the inclusion of these safety features in the PPC, as described in SkyRunner's supporting information, permits the certification of the SkyRunner MK 3.2 as a SLSA without adversely affecting safety, even though its MTOW exceeds that specified for an LSA. The FAA agrees with SkyRunner that the overall design configuration of the SkyRunner MK 3.2 increases safety during the ground roll and takeoff process, increases safety with regard to roll-over events, increases safety during landing, and increases safety during operation on paved surfaces, as well as soft and rough field conditions. The SkyRunner has separate engines for ground power and for flight. The definition of a LSA in 14 CFR 1.1 provides for a "single, reciprocating engine, if powered." Although the FAA did not address the possibility of separate ground and flight powerplants for LSA in its 2004 final rule, the limitation on a single reciprocating engine was only intended to apply to engines that act as powerplants for the aircraft while in flight and was not intended to preclude the use of other engines on the aircraft that could be used for ancillary non-flight purposes.

In establishing the definition of LSA, the FAA sought to ensure that LSA characteristics are consistent with the skills and training of the sport pilot and those persons authorized to perform maintenance and preventive maintenance on the aircraft. In issuing the final rule, Certification of Aircraft and Airmen for the Operation of Light-Sport Aircraft (69 FR 44772; July 27, 2004) (the LSA rule), the FAA believed that pilots operating an aircraft with a MTOW that exceeds that established by the rule should hold at least a private or recreational pilot's certificate. However, the FAA has determined that granting relief from the LSA weight limits in order to provide safety features of the SkyRunner MK 3.2 would result in the provision of an aircraft to persons exercising the privileges of a sport pilot that would provide a level of safety equivalent to that of an aircraft that, in fact, met the parameters of the LSA definition.

The FAA has determined the SkyRunner MK 3.2's flight characteristics are appropriate for it to be operated by persons exercising the privileges of a sport pilot certificate or a student pilot seeking a sport pilot certificate. The conditions and limitations of this exemption define several design features and operating characteristics that aircraft certificated under the provisions of this exemption must meet. These conditions and limitations ensure that the SkyRunner MK 3.2's operating characteristics are consistent with the training and skills of sport pilots. The safety features incorporated in the SkyRunner MK 3.2 are not required by the regulations; however, the FAA believes their inclusion in the aircraft's design will enhance safety and be particularly beneficial to sport pilots. As the FAA believes that these aircraft can be operated by persons exercising the privileges of a sport pilot certificate, the agency also believes that a person holding a flight instructor certificate with a sport pilot rating can provide flight training in such an aircraft even though it does not meet the parameters of the LSA definition.

The FAA has determined that the existing regulations, including 14 CFR 65.81 and § 65.107, sufficiently address the requirements for persons performing maintenance and preventative

maintenance on light-sport aircraft. The FAA has determined that permitting maintenance and preventive maintenance to be performed on these aircraft by persons who are only authorized to perform such actions on aircraft that meet the LSA definition would not adversely affect safety and would be in the public interest. The additional weight and safety enhancements included as part of the design and performance of the SkyRunner MK 3.2 do not add complexity to the maintenance or inspection aspects of the aircraft for repairmen or sport pilots beyond that of any other aircraft issued a special airworthiness certificate in the light-sport category. Accordingly, the FAA will permit persons exercising the privileges of a sport pilot and those persons holding a repairman certificate (light-sport aircraft) with a maintenance rating or inspection rating to perform maintenance and preventive maintenance on these aircraft in accordance with the privileges applicable to performing those activities on aircraft that meet the parameters of an LSA.

After careful consideration of the entire design and how it is intended to be operated, the FAA finds that a grant of exemption is in the public interest, subject to the specific conditions and limitations contained in this exemption. The safety features included as part of the design and performance of the SkyRunner MK 3.2, and mandated by conditions and limitations, provide a level of safety at least equal to that provided by the rules for persons exercising the privileges of a sport pilot certificate, even with the MTOW of the aircraft above that of other aircraft issued a special airworthiness certificate in the light-sport category. Although SkyRunner is requesting a MTOW of not more than 1,740 pounds (790 kilograms), we are granting a MTOW of not more than 1,800 pounds (816 kilograms). This adjustment is based on estimated weights provided by SkyRunner and to be consistent with the relief provided to Terrafugia Transition® aircraft with the grant of Exemption No. 16648.

The FAA's Decision

In consideration of the foregoing, I find that a grant of exemption is in the public interest. Therefore, pursuant to the authority contained in 49 U.S.C. 40113, and§ 44701, delegated to me by the Administrator, SkyRunner is granted an exemption from 14 CFR 21.181(a)(3)(i), § 21.190(a), and § 21.191(i)(3) to the extent necessary to allow the SkyRunner MK 3.2 PPC aircraft with a MTOW of 1,800 pounds (816 kilograms) to be eligible for issuance of a special airworthiness certificate in the light-sport category or experimental - operating light-sport aircraft, as applicable. SkyRunner is also granted an exemption from §§ 61.89(c)(1), 61.303(a), and 61.315(a) on behalf of persons exercising the privileges of a sport pilot certificate or student pilots seeking a sport pilot certificate to permit those persons to operate the SkyRunner MK 3.2 PPC and to permit flight time obtained in the SkyRunner MK 3.2 PPC to be considered flight time obtained in a light-sport aircraft. SkyRunner is also granted an exemption from §§ 61.411(g), 61.415(a), and 61.429(b) on behalf of persons exercising the privileges of a flight instructor certificate with a sport pilot rating to permit those persons to provide flight training in the SkyRunner MK 3.2 PPC. Additionally, SkyRunner is granted an exemption from §§ 43.3(c), 43.7(g), and 65.107(b) and (c) on behalf of holders of sport pilot certificates and repairman certificates (light-sport aircraft) with a maintenance rating or an inspection rating to permit those persons to perform inspections, maintenance, and preventive

maintenance on SkyRunner MK 3.2 PPC aircraft as authorized within those sections. All of these grants are subject to the conditions and limitations listed below. The FAA has determined that an exemption from § 61.419 is not necessary to provide the relief requested. The FAA has also determined that an exemption from §§ 61.321, 61.325, and 61.327 is not necessary; however, the FAA has included compliance with the provisions of those sections for certain persons as conditions and limitations of this exemption listed below.

Conditions and Limitations

1. This grant of exemption applies only to the SkyRunner PPC model MK 3.2.

2. SkyRunner must supply each purchaser of a SkyRunner MK 3.2 certificated under the provisions of this exemption with a copy of the exemption. A copy of this exemption must be carried on board each aircraft during its operation.

3. SkyRunner must maintain a current record of all owners of SkyRunner MK 3.2 certificated under the provisions of this exemption. The record must be made available to the FAA upon request.

4. SkyRunner may issue a Manufacturer's Statement of Compliance (FAA Form 8130-15) required by 14 CFR § 21.190(b)(1)(iii) for each SkyRunner MK 3.2 with an MTOW of not more than 1,800 pounds (816 kilograms) provided the aircraft meets all applicable requirements of 14 CFR § 21.190 and the Conditions and Limitations specified in this exemption.

5. The Manufacturer's Statement of Compliance (FAA Form 8130-15) required by 14 CFR § 21.190(b)(1)(iii) must state that the following safety features have been incorporated into the aircraft:

   a. A complete assisted ground roll system with independent power unit and transmission with differential and robust drive axles;
   b. Robust, active suspension;
   c. Four wheel braking system; and
   d. Four robust wheels and off-road tires.

6. When operating the SkyRunner MK 3.2, the operator must adhere to all applicable general operating rules and flight rules for aircraft in 14 CFR part 91.

7. Each person operating a SkyRunner MK 3.2 certificated under the provisions of this exemption must operate the aircraft in accordance with the assigned operating limitations that form a part of the Special Airworthiness Certificate.

8. Any person who holds a sport pilot certificate and seeks to obtain privileges to operate the SkyRunner MK 3.2 aircraft must receive the logbook endorsements, successfully

complete the proficiency check and complete the application specified in 14 CFR § 61.321.

9. Any person who holds a sport pilot certificate and seeks privileges to operate the SkyRunner MK 3.2 aircraft at an airport within, or in airspace within, Class B, C, and D airspace, or in other airspace with an airport having an operational control tower must receive and log the ground and flight training and obtain the endorsement specified in 14 CFR § 61.325.

10. Any person who holds a sport pilot certificate and seeks to operate the SkyRunner MK 3.2 aircraft must receive and log the ground and flight training and obtain the endorsement specified in 14 CFR § 61.327(a).

11. Any person who performs inspections, maintenance or preventive maintenance on the SkyRunner MK 3.2 aircraft under the provisions of this exemption must include a reference to this exemption in the maintenance record entry required to be made under the provisions of 14 CFR §§ 43.9 or 43.11, as applicable.

This exemption supersedes Exemption No. 15422, dated March 14, 2016, and terminates on July 31, 2019, unless sooner superseded or rescinded.

Issued in Washington, D.C., on July 21, 2017

/s/

Dorenda D. Baker
Director, Aircraft Certification Service

Enclosures:
Exemption No. 10450
Exemption No. 10829
Exemption No. 15422
Exemption No. 16648