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Speech by the Director of Civil Aviation

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## Speech by the Director of Civil Aviation Ms Poppy Khoza at the announcement of the introduction of RPAS regulations

Thank you Programme Director.

First let me start by extending a warm welcome and express our sincere gratitude to you... our colleagues in the media.

I would like to acknowledge the sacrifice made by many of you who ordinarily would not be working today since it's a Sunday.

Ladies and gentlemen, we are gathered here today because it is a momentous occasion in the history of the local aviation industry; and to some extent the world.

To cut straight to the chase, I have the pleasure of announcing that South Africa will be introducing new regulations that will help regulate remotely piloted aircraft systems, popularly known as drones. These regulations have recently been signed by the Minister of Transport, Ms Dipuo Peters and will be published and implementable by 01 July 2015.

Before I go further into details about these new regulations, I first want to point out that remotely piloted aircraft systems are aircraft that can fly without a pilot on board. These aircraft come in various shapes and sizes and can be controlled remotely by an individual on the ground, in another aircraft or through an on-board computer system.

Traditionally, remotely piloted aircraft systems were used primarily in military operations; however, they can also be used for many other purposes outside of the military. Other uses include conservation efforts, aerial surveillance, scientific research, journalism, and many other commercial and non-commercial activities. Basically, the use of remotely piloted aircraft systems can be limited only by one's imagination.

While these types of aircraft have been used for some time in military operations, their useful deployment in civilian activities has only become more apparent in recent times. It is also a fact that these types of aircraft are a relatively new component of the civil aviation framework. It is also a fact that their rapid advancement has caught many Regulators worldwide by some level of surprise. Hence in recent times Authorities

around the globe have been putting their heads together and collaborated with the International Civil Aviation Organisation (ICAO in short), in an attempt to understand, define and ultimately integrate this technology into the mainstream aviation sector.

Ladies and gentlemen, it should also be noted that under normal circumstances ICAO would take the lead in terms of developing Standards and Recommended Practices; and Regulators would then transliterate the prescribed Standards and Recommended Practices into legally-enforceable local civil aviation regulations. In the absence of guiding documents from ICAO, Regulators such as ourselves have had to swiftly derive measures to address the regulation deficiency in response to a growing demand to regulate this sector.

I am pleased to say that the SACAA together with the Department of Transport and other key industry role-players rose to the occasion and collectively worked tirelessly to develop these new regulations.

Ladies and gentlemen, please allow me to touch briefly on the process undertaken to develop these regulations.

In developing the regulations, the SACAA sourced and received valuable input from relevant State entities as well as industry role players, including operators, manufacturers, and other airspace users.

The process included, among others, hosting industry engagement workshops and a conference as well as allowing robust debates during Civil Aviation Regulation Committee meetings. The Civil Aviation Regulation Committee (CARCom in short) is a representative forum consisting of members appointed by various stakeholders to discuss civil aviation regulations.

After months of amendments, refining and incorporating requests by various stakeholders; a draft was sent to the Minister of Transport for review and approval. I am happy to say that we received the approval on 5 May 2015.

A decision has been made to set the first working day of July 2015 as the day on which these regulations will become effective. These few weeks provide a window of opportunity for my team to put the final touches to the internal processes required to provide the necessary approvals and also to ensure that enforcement processes are in place in case the need arises. So, we are ready and I am sure the industry is also eager for the rollout of the regulations.

Ladies and gentlemen, please allow me to now touch on some of the key points contained in the new regulations.

But before I do that, allow me to remind others that civil aviation regulations are organised into sections called PARTS for easier reference by all stakeholders, locally and across the world.

Each Part deals with a specific section of aviation operations, e.g. helicopters, certification procedures for products and parts or components used on aircraft; certification of airports, flight schools, repairs stations, and so forth. You get the drift!!!

Now, in this case, this particular set of regulations will be known as Part 101.

Let me also clarify.... and believe me we did get a lot of queries whether these regulations would extend to toy aircraft. The answer is NO!

In essence Part 101 of civil aviation regulations does not apply to:

- toy aircraft;
- an aircraft operated in terms of Part 94 (i.e. non-type certified aicraft) of the civil aviation regulations; and
- autonomous unmanned aircraft, unmanned free balloons and their operations or other types of aircraft which cannot be managed on a real-time basis during flight.

In order to guide the basis for basic aviation safety and security, Part 101 of civil aviation regulations states that:

- No remotely piloted aircraft (RPA) shall be operated, unless such RPA has been issued with a letter of approval; which is valid for a period of 12 months.
- No RPA shall be sold unless the seller has notified the buyer of the operational requirements as imposed by the SACAA.
- No person shall operate an RPAS unless:
  - a. the RPA is in a fit-to-fly condition;
  - b. the pilot is the holder of a valid remote pilot licence;
  - c. the remotely piloted aircraft station is compatible and interoperable with the aircraft it is connected to in all phases of flight; and
  - d. the RPA is being controlled by only one piloted aircraft station at any given moment in time.
- No RPA shall:
  - a. tow another aircraft;
  - b. perform aerial or aerobatic displays;
  - c. be flown in formation or swarm;
  - d. be flown adjacent to or above a nuclear power plant, prison, police station, crime scene, court of law, national key point or strategic installation.

- No RPA shall be operated:
  - a. above 400ft above the surface; and
  - b. within a radius of 10 km from an aerodrome.

The new regulations further prohibit:

- the flying of an RPA directly overhead any person or group of people or within a lateral distance of 50m from any person;
- the flying of an RPA within a lateral distance of 50m from any structure or building;
- the operating of an RPAS in weather conditions that do not allow unobstructed visual contact to be maintained with the RPA by the operator unless and other airspace users, unless in approved beyond visual line of sight or night operations;
- the use a public road as a place of landing or take-off of an RPA, except when involved in civil defense or law-enforcement operations and provided that at all times reasonable care is taken to ensure the safety of persons and property; and
- the flying of an RPAS in controlled airspace, except by the holder of an RPAS operators certificate and on condition that such operations have been duly approved.

The new regulations further prescribe that an RPA pilot is expected to complete a preflight inspection prior to each flight. In addition, and except for restricted visual line of sight operations, no RPA shall be operated unless the RPA pilot has a functioning airband radio in his / her possession, tuned to the frequency or frequencies applicable to the air traffic services unit providing services or controlling such area or airspace. The RPA pilot shall, using the registration of the RPA as a call-sign, make the required radio calls, indicating the altitude, location and intended operation of the RPA in that area and at such intervals as are required in order to ensure adequate separation from other aircraft is maintained.

Part 101 of civil aviation regulations also prohibits the releasing, dispensing, dropping, delivery or deployment of objects from a remotely piloted aircraft. The regulations further states that RPA shall not carry dangerous goods as cargo.

Further, the regulation states that no person shall act as pilot of an RPA, except when undergoing a skill test or receiving flight instruction, unless he or she is in possession of a valid remote pilot licence in the relevant category. A remote pilot licence may be issued for the following categories:

- aeroplane remote pilot licence;
- helicopter remote pilot licence; and
- multirotor remote pilot licence.

In addition, the following ratings may be endorsed on the licence:

- visual line of sight operations;
- extended visual line of sight operations; and
- beyond visual line of sight operations;

An applicant for a remote pilot licence shall:

- not be less than 18 years of age;
- hold at least a valid Class 4 medical certificate for beyond visual line of sight operations or operations involving RPAS classified as class 3 or higher; or
- hold a restricted certificate of proficiency in radiotelephony (aeronautical); and
- provide proof of the ability to speak the English language at proficiency level 4 or higher.

The holder of a remote pilot licence must maintain, in a pilot logbook, a record of all his or her flight time, instrument time, simulation time and instruction time. Moreover, all accidents and incidents involving an RPA must be reported, especially where there is:

- any injury to a person;
- damage to property; or
- destruction of the RPA beyond economical repair.

The new regulations also states that an RPA shall give way to manned aircraft. Further, the RPA shall avoid passing over, under or in front of manned aircraft, unless it passes well clear and takes into account the effect of aircraft wake turbulence.

Whilst the above summary of regulations outlines some of the safety and security considerations; exceptions can be made but will require application for exemption and the necessary approval by the SACAA. The Regulator has also streamlined its law enforcement processes in case there are cases where RPA operators blatantly disregard applicable regulation and in the process put aviation safety and security in jeopardy.

Ladies and gentlemen these regulations are contained in the press packs handed out to you and will also be available online on our website, i.e. www.caa.co.za as from Tuesday, 30 June 2015.

Ladies and gentlemen, in coming up with these regulations, the SACAA took into account the national safety and security needs into account. We also took into account the work done by ICAO thus far. In fact, the SACAA is a member of the ICAO RPAS Panel which is working on this matter. As such, we have some form of indication as to where things are likely to go from an international perspective. We have thus taken what is likely to be an international position and customised it into local regulations,

taking into account our unique conditions and the views of our respective stakeholders and airspace users.

We are mindful that any form of regulation would never satisfy each and all stakeholders. However, we have bended backwards to try and accommodate each and every suggestion made. We have thus come up with what can be regarded as the best interpretation of consensus by the majority of stakeholders.

We are also mindful that there will be one or two instances where someone may voice their dissatisfaction. We also recognise that each stakeholder is motivated by their own motives, be it non-profit or commercial. As the Regulator we cannot take sides and purport that one motive is more important than another. The most important thing in all this is the development and preservation of a safe and secure aviation industry. I reiterate.... safe and secure aviation industry – nothing else!

It is also important to note that any discontent by an individual or entity does not mean that the regulations as they are, are null and void! Let us all be reminded that this is the very first attempt at regulating this new industry. Moreover, there are no best practices to benchmark against anywhere in the world.

Just like any new initiative, we should all expect some minor challenges at the beginning, which we will be agile in responding to. As the SACAA we are not claiming that these new regulations are static. Given the rapid pace of technological development in this area, we treat these RPAS regulatory framework as a continual work in progress, and hence we will continue to engage with industry to refine the regulations when, where and as deemed necessary. We will also take into account what ICAO will propose - when they are ready - as globally accepted Standards and Recommended Practices.

Until then I urge all operators and airspace users to observe and comply with these new regulations. We should always remember that in aviation there is absolutely no room for errors... as errors usually result in loss of lives!

Before I conclude my remarks perhaps I should point out that the aviation industry can at times be lucrative. The reason I am saying that is that very often when we introduce regulations that seek not only to promote new technology and overall development of the industry, we often come across individuals and entities that are determined to put profits ahead of the overall safety of other airspace users.

In the process of developing regulations it is normal that there would be differing views on the regulations. However the Regulator's obligation is to ensure civil aviation safety and security; and as such all the input will tested against this ultimate objective.

Ladies and Gentlemen of the media, the process of developing these regulations principally included extensive consultation with the industry and as the regulations are

now signed by the Minister, the Regulator has every intention of still engaging the industry further. We believe there is a correct platform for everything and there is therefore no reason for anyone to feel excluded from this process.

As we have done before, we will conduct national industry workshops to discuss the implementation of these regulations and, therefore any assertion that seeks to give an impression that the Regulator is not willing to give the industry an ear is simply misguided and does not bode well for a matured industry such as ours.

As the Civil Aviation Authority, we cannot allow a situation where one manufacturer or group get to put the lives of other airspace users at risk just because they want to push sales volumes. Statistics shows that wherever the basic principles of airmanship are disregarded, there is carnage. We all can learn from the likes of commercial passenger operators where safety and security is put above everything else... and the zero percent accident fatality rate thus far attest to this assertion.

Ladies and gentlemen, South Africa's aviation safety and security setting is highly regarded throughout the world. Our rating by the International Civil Aviation Organisation, which regulates aviation globally, sits above the 80% world average. This is the record we do not wish to compromise. We also continue to maintain our Category 1 status as declared by the Federal Aviation Administration, meaning our operators are allowed to operate in the US. In fact, our operators can freely operate throughout the world because our aviation safety and security oversight is world-class.

As the Civil Aviation Authority, we are not claiming that these regulations are perfect as this involves a rapidly evolving civil aviation technology. These regulations are only a first attempt towards perfection. Hence, we remain open to discussing any opinion that may improve them... but this should be done at the regulated platforms where all airspace users are represented and all input is given equal consideration.

Ladies and gentlemen, let me conclude by emphasizing that the Civil Aviation Authority is always 100% behind the development of the aviation industry. In fact, the development of the aviation industry is a critical aspect of our mandate. However, we are not in the business of sacrificing lives for the sake of commercial interests. It is our primary mandate to regulate aviation safety & security and this we must do without fear or favor to preserve lives and aviation operations as mandated by the government of SA and her people.

I thank you for your undivided attention.

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## About the SACAA:

The South African Civil Aviation Authority (SACAA) was established on 1 October 1998 following the enactment of the South African Civil Aviation Authority Act, No.40, in September of the same year. The SACAA promotes and maintains a safe, secure and sustainable civil aviation environment, by regulating and overseeing the functioning and development of the industry in an efficient, cost-effective, and customer-friendly manner according to international standards.

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