To: All SAMAA members
Date: 16 April 2021.

**Communique # 22**

Dear SAMAA Member,

Good day to all SAMAA members, we trust that this communiqué reaches you in good health.

**SAMAA Insurance** – In continuation with the last communiqué. The planned meeting held with the insurers yielded positive results, the impractical constraints were discussed, suggestions tabled with most being received well. They have requested a few days for consultation with the reinsurers whereby they will get back to us, expected within the next 7 days or so.

**Our Hobby / Sport at risk.** – We must take cognisance of the fact that we may as well have become our own worst enemy. As an association we should take care not to destroy what took years to build, and more importantly being enjoyed by many passionate aviators. In the last few months we got reports of members that are flying over residential areas, members flying at non-compliant fields, Facebook pictures of new “non-registered” fields without any intent of following any protocols, WhatsApp groups advocating rogue flying, the spreading false news and rumours, and of individuals that is exploiting the situation for their own benefit.

By continuing with this type of behaviour we will alienate the insurance market, as we propagate a Cowboy-type organisation that does not respect live and limb. It only takes one serious accident to blow the lid without any chance of implementing any recourse. The SMC is mandated to deal with these types of matters and will continue to be doing just that. However, you should decide whether you are going to be part of the problem and/or part of the support going forward in finding sustainable solutions. Everyone should show great appreciation for those members who are refraining from flying on temporarily closed fields. We should applaud them in these extreme times as they are the real heroes. We are all responsible for keeping our flight lines safe and compliant, and we should never promote anything that causes any break down. It remains a choice...what is yours??

**COVID-19 Update** – RSA is in lockdown level 1. No change in our Broadcast this week.
- Curfew from 00H00 to 04H00 in place.
- Always wear your face masks.
- Social distancing.
- CV-19 Protocols must be followed.
- NOTE: Have your protocol file on hand for possible review by authorities.

We are reminded of a possible third wave and the consequences that might have; please be wise and sanitize, flatten the curve.
Events planned.

- 2021 Aerial concepts SAMAA Combined Power Nationals
  - Date: 24-28 April
  - Organiser: SAMAA
  - Contact: 083 283 1681

- F5J Team Qualifier – RC Glider (GEMS). Team qualifying event.
  - Date: 2nd May ’21.
  - Mike Vos 081 361 5063

Who is this Bernoulli?

The Bernoulli Principle Daniel Bernoulli (1700 – 1782) was a Dutch-born scientist who studied in Italy and eventually settled in Switzerland. Born into a family of renowned mathematicians, his father, Johann Bernoulli, was one of the early developers of calculus and his uncle Jacob Bernoulli, was the first to discover the theory of probability. Although brilliant, Johann Bernoulli was both ambitious for his son Daniel and jealous of his son’s success. Johann insisted that Daniel study business and later medicine, which Daniel did with distinction. It was mathematics, however, that really captured Daniel’s interest and imagination. Despite Daniel’s best efforts, Johann never acknowledged his son’s brilliance and even tried to take credit for some of Daniel’s most important ideas.

As a result of his growing fame as a mathematician, Daniel was invited to St. Petersburg to continue his research. Although Daniel was not happy in St. Petersburg, it was there that he wrote “Hydrodynamica”, the work for which he is best known. Bernoulli built his work off of that of Newton. In 1738, he published “Hydrodynamica”, his study in fluid dynamics, or the study of how fluids behave when they are in motion. Air, like water, is a fluid; however, unlike water, which is a liquid, air is a gaseous substance. Air is considered a fluid because it flows and can take on different shapes. Bernoulli asserted in “Hydrodynamica” that as a fluid moves faster, it produces less pressure, and conversely, slower moving fluids produce greater pressure. Img. 2 Daniel Bernoulli (Public Domain) h p V1 P1 A1 1 2 V2 P2 A2 Fig. 2 Bernoulli fluid experiment We are able to explain how lift is generated for an airplane by gaining an understanding of the forces at work on an airplane and what principles guide those forces. First, it takes thrust to get the airplane moving - Newton’s first law at work. This law states that an object
at rest remains at rest while an object in motion remains in motion, unless acted upon by an external force

Then because of the shape of an airplane’s wing, called an airfoil, the air into which the airplane flies is split at the wing’s leading edge, passing above and below the wing at different speeds so that the air will reach the same endpoint along the trailing edge of the wing at the same time. In general, the wing’s upper surface is curved so that the air rushing over the top of the wing speeds up and stretches out, which decreases the air pressure above the wing. In contrast, the air flowing below the wing moves in a straighter line, thus its speed and pressure remain about the same. Since high pressure always moves toward low pressure, the air below the wing pushes upward toward the air above the wing. The wing, in the middle, is then “lifted” by the force of the air perpendicular to the wing. The faster an airplane moves, the more lift there is. When the force of lift is greater than the force of gravity, the airplane is able to fly, and because of thrust, the airplane is able to move forward in flight. According to Newton’s third law of motion, the action of the wings moving through the air creates lift.

Winner of Communique #21 – Herman Venter from St Blaize Model Flyers is the word search winner of Communique #21, please see overall standings below.

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| Total Winnings            | R 1 700       |

This week’s Word search – Find the word, mentioned below, circle it, and sent it back to us for review.
Please submit your answers to admin@samaa.org.za with your name and SAMAA number before 12:00PM 29 April 2021 to stand a chance to win **R 200.00** with the compliments of our new sponsor, **New Nation Construction**. Good Luck and enjoy.

To be informed remains a choice, thank you for your time and the decision to read this week’s communique.

Have a great one.

Best regards
SAMAA Management Committee

A big thank you to our sponsor New Nation Construction for their contribution, please pay them a visit for more details. [https://newnationconstruction.co.za/](https://newnationconstruction.co.za/)