

Response to the Invitation towards the potential amendment of the Agreement concerning the conduct of Scientific Balloon Flights for Civil Research Purposes of 16 February 2006.

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Introduction.

The development, integration and implementation of Scientific Balloons has a well defined and superior capability within the history of modern science and aviation. Gases which are lighter than standard atmospheric gases, and are now largely non-flammable, have been successful in showing many groups throughout history and scientific enquiry, that they can produce quality lift and retention within an atmospheric space. Thus, we can readily acknowledge that this is a good industry standard within this paradigm. However, once we analyse its' current capabilities within the chosen field of this review, we can suggest improvements and capabilities, which will ensure that the United States of America and Australia, can produce quality outcomes for the purposes of this treaty review and to also, fundamentally, ensure a range of possibilities for the booming space age and to ensure our competitiveness.

My Response.

Since we now know that lighter than air gas balloon systems have an excellent scientific capability and future within Australia, we can now examine and make a prediction on its' potential future capabilities and thus, what amendments would be required for any extension of an agreement which concerns this treaty option. Firstly, we must examine the requirements of civil research options for this treaty. These would include; weather mapping systems, soil and ocean degradation, flora / fauna alternations and various effects of climate change. The way that the treaty could be amended here, specifically involves if the balloon system is sophisticated or advanced enough to be successful in achieving these defined goals. This would be necessary, as modern scientific balloon systems will need to start competing with much more advanced and cost-effective satellites. Satellites are able to successfully achieve those defined goals and upload information in virtually real time. Could another advanced integrated and modern balloon system be generated for success in our modern scientific

fields? This could be another useful amendment, as it would generate further investments into this field.

These previous notes lead into the next element within a potential amendment and generation for the New Space Age. Now that we know that with some planning, investment and guidance, scientific balloons will need to be much more advanced if they are to compete with a fast-developing satellite industry. With some work, balloons could be advanced into much more powerful processes and systems, which will allow us to explore and successfully inhabit planets, such as Venus. With some investment and planning, we could make an amendment to this treaty, which would allow discreet development of this technology to advance and generate real time applications for the New Space Age. This would of course allow Australia, the USA and it's allies, to ensure a rapid development and advantage within the New Space Age. Further if human habitation is not yet possible from our current position, we can still deploy advanced balloon systems to Venus and allow permanent and stable scientific analyses for future human habitation. This is a great chance to allow further development, to ensure success in our chosen field and to ensure competitiveness against our emerging international competitors.

Conclusions.

Since we now know that the scientific balloon industry is in need of review, it has a clear goal and excellent future within the New Space Age. The modern satellite industry is advanced, interconnected and has excellent capital resources behind it. If scientific balloons want to remain competitive, then it must enhance operations, secure capital investment and secure its' position within the booming New Space Age. All of these chances exist and we have a great chance to secure our future by enhancing this already excellent technology.

Cameron Ikin, 2/7/24.