The final element of this address concerns the 'regulators' - the people, usually from the civil authorities, who write the rules ostensibly to "make it safer"! The key word here is 'objectivity'. Before considering knowledge, or lack of it I must consider the motivation of regulators. Consider this scenario. Your business might be designing controlled airspace. You may have noticed that the amount of such airspace is seldom reduced. Having just finished the latest 'improvement', what do you do? See what airspace can be done away with? No. More likely design some more! In the same way, there is seldom a reduction in the rules or the design criteria.

But, are such changes really introduced in an objective way. All too often, they may be introduced as a reaction to a single event. A number of examples come to mind.

- A general aviation department is formed because of one year's poor fatal accident record.

- A pilot crashes into a mountain while flying an airplane in cloud. The whole national training regime is reviewed because of this one accident.

In some cases the reaction is due to political pressure; in most cases it lacks objectivity. What is the extent of the risk that they, the regulators, seek to minimize? All too often, they do not know.

In this context, it is worth considering a definition of the word 'minimize'. A U.S. Advisory Circular gives this as: "to reduce, lessen or diminish a hazard to the least practical amount. The least practical amount is that point at which the effort to reduce a hazard significantly exceeds any benefit, in terms of safety, derived from that reduction."

It is a definition that should be engraved on the heart of every regulator.

So, where does knowledge come in? Sadly, the answer is "often not!" If the risk is not significant, why increase the amount or detail of the rules and regulations to reduce it? Not only do they not know proposals seek to go beyond 'minimizing' the risk, they aim to remove it altogether. Such a lack of objectivity is little short of appalling.

But this is emotive stuff, so consider these examples:

- In the UK no pilot's licence is required to fly a glider. Also, there is a 'declaration of health' rather than a medical examination and certificate. In 30 years, and over 10 million glider flights, there have been three accidents from medical causes; each involved pilots with an airplane license and only one student was killed as a result.

Compare this with the cost of medical examinations, an estimate in excess of Dm. 7,000,000 for Germany alone!

Regulators cannot prove the need for a medical examination but we can show that a declaration of health achieves as high a standard.

If the regulators argue that it is to protect third parties on the ground, then consider these figures for the UK:

- For the years 1983 to 1992, the number of airplanes (excluding gliders) has risen from 6,013 to 11,833; the total number of accidents in the same period was 2064, of which 190 were fatal. Nineteen accidents involved third parties, people or property on the ground, and there was only one fatality. Was there a medical cause? Of course not.

I could go on; there are numerous example of regulation for its own sake, but time does not permit. So I will close with a summary.

Glider pilots should recognize the need to understand their sport, the weather, technical aspects, the risks and the need for training.

- Meteorology continues to be increasingly well understood. Information from satellites and computers enables recognition of the weather patterns to realize the soaring opportunities. OSTIV has played its part here.

- OSTIV Airworthiness Standards, via German LFSM, formed the basis for Joint Air Worthiness Requirements (JARs), and continue to do so. The expertise of the Sailplane Development Panel (SDP) continues to refine these requirements.

- Finally, the Training and Safety Panel has, I would like to think, concentrated minds. The one thing that is lacking is an OSTIV Guide on good practice, and work has started on this project.

There is an urgent need for the gliding community to play a more active role in regulatory affairs at every level. It is no use complaining about regulatory changes or of not being consulted. Sometimes this involvement needs to be political.

In the final analysis, it is only the people who glide who can help themselves control their sport. Safety is not achieved through regulation but education - Safety through Knowledge.

IMPORTANT NOTE FROM THE EDITORS OF TECHNICAL SOARING MAGAZINE

"The period between the 1993 and 1995 OSTIV Congress is only 19 months instead of the usual two years.

There will thus be less space available for the Borlange papers than there has been for those of previous congresses, if publication is not to overrun the intervening period unduly, since the number of papers presented was slightly increased.

This means that, to avoid undue delay in completing the publication, all but the shortest papers will have to be condensed, sometimes considerably.

Only in a few cases will it be practical for the individual authors to be contacted; usually the shortening will be done by the editor. However, authors may rest assured that all important arguments and conclusions will be retained."