

## PHILOSOPHY OF DESIGN AIRCRAFT - LIGHT FIGHTER PHILOSOPHY

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*The original light fighter concept of achieving a “jet Spitfire” is based on four fundamental principles:*

- 1. Defeating the weight spisal by compactness, and designing for small size and simplicity.*
- 2. Restriction of equipment to operational necessities.*
- 3. Combining of more than one function in a single component.*
- 4. The use of a low specific weight turbojet engine whit low specific consumption.*

*The effect of this has been produce a fighter of high performance, but with traditional construction, and relatively cheap and simple to build an maintain. The Gnat makes it possible or even a small nation to maintain and to operate from standard aerodromes a modern jet air force of a size to obtain air superiority without risking financial ruin.*

*The light fighter also offers operational advantages by its small size, which makes it difficult to detect, and it presents a smaller target on the ground and in the air than the conventional fighter.*

*The content of the talk is taken from the fifties, but due to the greater significance in the development of combat aviation with radical transformation at that time, the effect is even found today.*

*Design philosophies do not age and, according the case, they become eternal.*