

J102(A77)

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Proposal Abstract J102(A77)

1. **Arms Control Problem:**  
Nuclear weapons - cruise missiles
2. **Verification Type:**  
Remote sensors - satellite
3. **Source:**  
Tsipis, K. "Cruise Missiles". Scientific American 236, no. 2 (February 1977): 20-29.
4. **Summary:**

The author analyses several arguments concerning the value of different types of cruise missiles. He notes that national technical means of verification could distinguish between tactical and strategic cruise missiles on three counts:

- (1) Tactical cruise missiles have a volume of less than half a cubic metre, while strategic cruise missiles have volumes greater than half a cubic metre.
- (2) Tactical cruise missiles are powered by turbojet engines while strategic models are powered by turbofan engines.
- (3) Tactical cruise missiles have a thrust of less than 600 pounds, while strategic models have a thrust of over 600 pounds.

From these criteria it is possible to differentiate between strategic and tactical cruise missiles on the basis of the characteristic thrust signature left by all missiles. This can be accomplished by reconnaissance satellites using infra-red devices.