HOMEMADE MISSILE

By Clyde Barrow

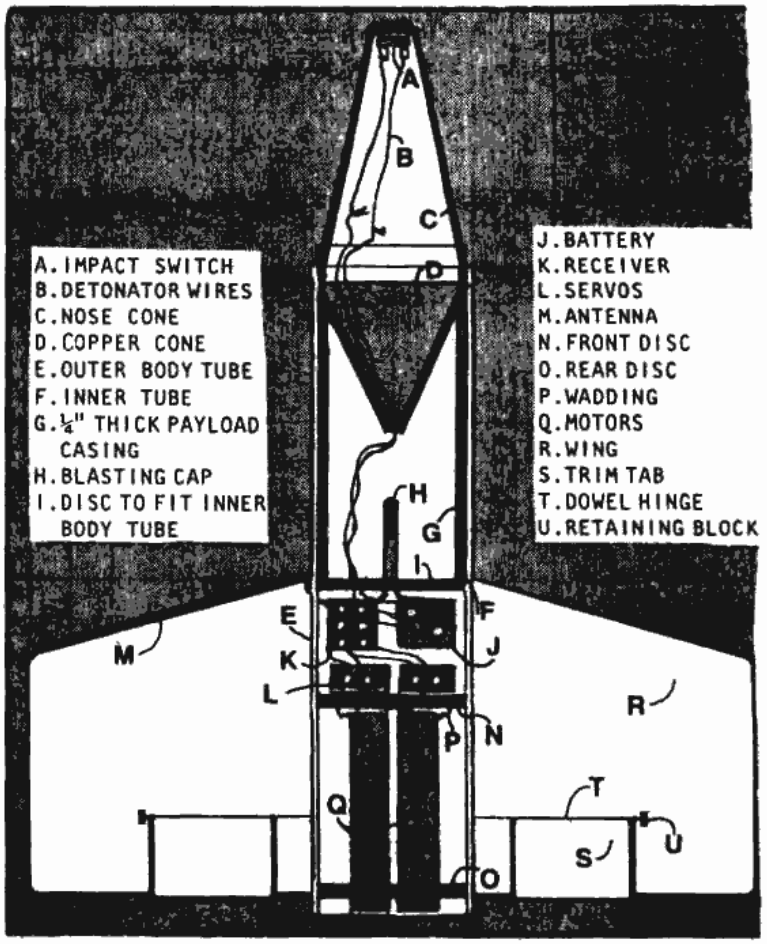
INTRODUCTION

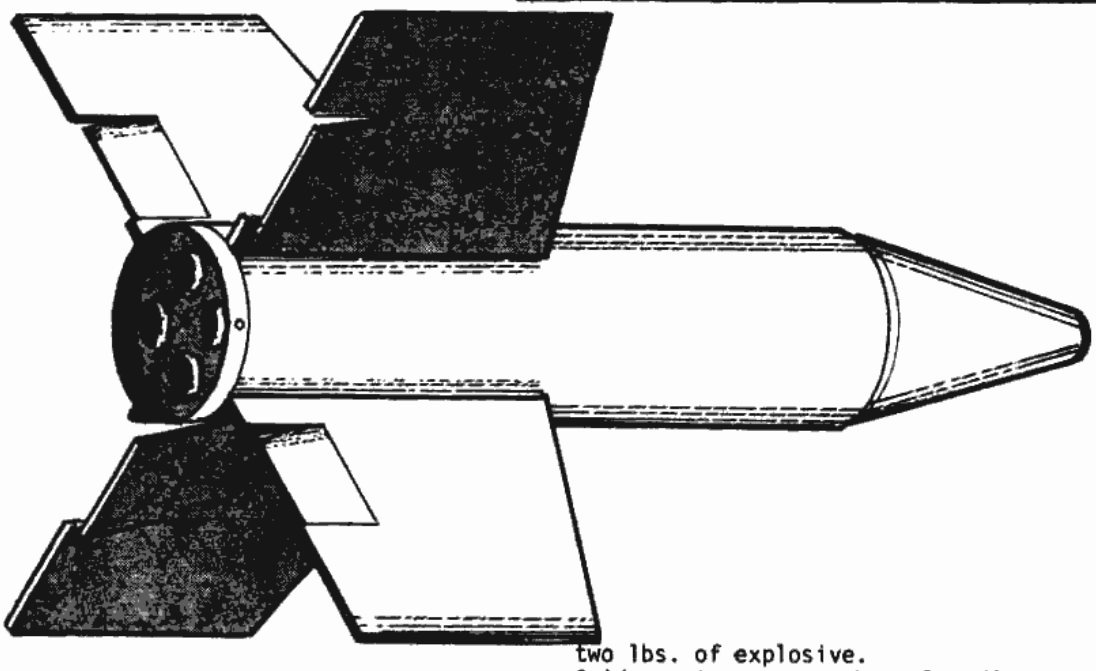
The missile plan detailed in this article is a sythesis of several antitank missile designs used by NATO forces during the last 15 years. The construction data has been broken down into three sections: airframe/motor assembly; guidance unit; and payload/ detonator section.

This design is intended as a general guideline only and there are many areas where alternative materials may be substituted. All materials described are available from either model rocket suppliers or firms that sell radio control airplane accessories. A sample list of these firms and their addresses has been included at the end of the article.

Actual construction information has been kept to the basics. Those familiar with building model planes and rockets will be able to improve upon the design and come up with a more sophisticated product. For those unfamiliar with radio control or model rocketry I suggest buying a copy of 'Basics of Radio Control Modeling' by Marks and Winter and 'The Handbook of Model Rocketry' by Stine. These and similar publications are available at the local library, hobby shop, or bookstore. There are also several radio control plane magazines available at the local news stand.

As cost is a factor, it should be noted that these missiles can be built for about $50 each. This compares favorably with the Soviet SAM missile, currently used by third world terrorists.SAM missiles are known to cost about $1000 each to produce.





GENERAL DATA

Type: surface to surface antitank missile.
Configuration: length, 24"; diameter, 4"; wingspan, 18"; solid balsa cruciform wings, spiral wound paper tube body and nosecone.
Propulsion type: 4 solid propellant single stage motors - burning time - three seconds, maximum combined thrust - 36 lbs - average combined thrust - 8 lbs.
Payload: high explosive shaped charge approx. two lbs. of explosive.
Guidance type: two channel radio control, visually guided to target. 4 movable trim tabs on wings for steering.
Detonation: impact switch in nose activates electric detonator.
Launching: launch frame has rail to accept tee shaped launch lug on missile body. frame is adjustable for height and has top mounted handle for carrying.