

Air Force Institute of Technology

POI AND

Flyer scattering rocket

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An known from the past apparatus for spreading leaflets or other cargo comprises a cylindrical load compartment for containing leaflets or other alternative cargo.

Delivery of the cargo starts firing with a pyrotechnic gas generator fuse at the base of the cargo compartment, equipped with an ejection mechanism that ejects the charge forward.

The detonator then causes a delayed ignition of the second gas generator ignited in the center of the spreading device after the load exits the cylindrical compartment and the pneumatic ejection of the charge from the wrapped packages in a cloud of turbulent gas mixed with air leaving the wrapping material on the structural frame of the apparatus.

After actuation, this device maintains structural integrity to avoid presence of any mutilating debris in the cloud of eg. ejected leaflets.





The load placed inside the loading compartment is formed into rolls one above the other separated from each other by separating discs.

The novelty of this present invention

- Is that the loading compartment has at the bottom a piston with a gasket around its circumference and placed beneath the piston a pyrotechnic throwing device connected to a mechanical igniter equipped with a programmable electronic delay system, enabling selection of the desired launch time.
- From the side of the frontal ballistic cap, the compartment is covered with a closing disc. The
 mechanical fuse is connected by a connecting sleeve to the rocket engine.
- Preferably, a pipe is placed in the longitudinal axis of the loading compartment in order to facilitate
 ejection of the ballistic cap and opening of the compartment in result of the of the piston motion.

The leading advantage of this invention is structural simplicity and effective damage free distribution of leaflets over a selected terrain.

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