

MINISTRY OF SUPPLY

SHELL MEX HOUSE, STRAND, W.C.2

GERRARD 6933
Extn. 257 or 810

PRESS NOTICE

STRATOSPHERE BALLOONS

AND HEAT RAYS

Supply Ministry Exhibits

at Schoolboys' Show

Visitors to the Ministry of Supply's stand at this year's Schoolboys' Own Exhibition - open at the New Horticultural Hall, London, from December 31 to January 10 - can see how weather forecasters get information by radio from the stratosphere, 60,000 feet above the earth; how the Centurion tank behaves in action; and how a 20 mm. Hispano aircraft gun works.

They can also operate a Centurion's 20-pounder gun on this stand, or direct an invisible heat ray, of the most advanced science-fiction type.

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The heat ray will explode photographers' flash bulbs, pop toy balloons and light up a bank of neon lamps which are not connected to any power supply.

Built from old Service equipment by scientists of the Ministry's Telecommunications Research Establishment, the ray consists of a narrow beam of radar waves, sent out through a funnel-shaped transmitter, and can be made to turn corners by "bouncing" the beam from glass prisms.

Young apprentices from the Telecommunications Research Establishment will explain to visitors how the ray set operates.

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Dominating the Ministry's stand is a ten-foot diameter weather-balloon, of the type which is sent up into the stratosphere to radio information on climatic conditions to weather forecasters.

Boys who work for the Ministry on meteorological equipment will demonstrate how the balloon works. By turning a switch which operates a heater in the equipment attached to the balloon, any change in temperature will immediately be sent by radar to the stand below.

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With this exhibit, there will be a scale model of one of the most up-to-date weather stations in the country, showing control towers, laboratories and radar receivers.

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Apprentices from the Royal Arsenal, Woolwich, have brought a 20-pounder Centurion tank gun mounted in a test firing frame to the Exhibition.

Visitors will be able to sit in the gunner's seat and operate the breech and elevating mechanisms. They will also see how the gun is loaded and unloaded.

A scale model of a Centurion tank, with all the moving parts in operation, will be shown alongside the gun by apprentices from the Royal Ordnance Factory at Barnbow, Leeds, who have built the model as part of their training.

The real tank, in action on testing grounds at Leeds, will be shown on a film projected on the stand.

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A 20 mm. Hispano aircraft gun, cut-away to show the interior mechanism, will also be exhibited by boys from the Poole Royal Ordnance Factory, where these guns are produced.

The demonstration shows how the guns are loaded and spent ammunition is rejected.

Information Division.
31 December, 1952.

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