

Health and Safety Executive OC 483/20

Field Operations Division

To

FCG Specialist Inspectors (Electrical)

GEC-ALSTHOM INSTALLATION EQUIPMENT LTD

M-PACT AIR CIRCUIT BREAKERS

Introduction

1 The purpose of this OC, which is based on TD Minute TD/1B/T/2/1991, is to bring to the attention of Electrical Specialists, a potential failure mode of the above equipment and the corrective actions available.

Background

2 An occupier found that the equipment failed to trip when the manual trip button was depressed. The occupier put this down to lack of maintenance.

3 It was also found that depressing the manual trip button on this particular unit allowed release of the Castell key provided for interlocking. Fortunately no incident resulted.

4 Discussions have been held with GEC-Alsthom Ltd. They are aware of failures-to-trip via the manual trip button of some 6 unites out of a total of 50,000 units installed. In each case the equipment had not been maintained or lubricated as specified by the manufacturer.

5 GEC-Alsthom Ltd have, over a period of time, incorporated modifications to prevent release of the Castell key or other similar device in the event of non-tripping of the circuit breaker.

6 A further modification proposed, but not yet available, is to interlock the key release directly to the circuit breaker operating mechanism.

7 It is possible to modify the more modern M-PACT units but this requires partial dismantling of the unit and replacement of several parts.

8 The evidence available does not support a total retro-fitting programme.

9 It is most important that the correct maintenance and lubrication regime is followed.

7 June 1991

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ASI headings

Circuit breakers: equipment: interlocking: machinery.