REMARK TO A THEOREM DUE TO R. SANDLER

ODDVAR IDEN

To prove [2, Theorem 1], it is enough to remark that if x is a point or line of F_4 which is fixed under H, then x is fixed under each subgroup of H. By Sylow's theorem, H has a subgroup H' of order three. By [1, p. 420, Lemma 2.2], it follows that x is in the subplane of F_4 generated by those elements of $\{A, B, C, D\}$ which are fixed under H'. This subplane consists of a point only. Hence, x is in $\{A, B, C, D\}$, which is impossible. This argument can be used in many other cases.

References

1. P. Dembowski, Freie und offene projektive Ebenen, Math. Z. 72 (1960), 410-438. 2. R. Sandler, On finite collineation groups of F_5 , Can. J. Math. 21 (1969), 217-221.

University of Bergen, Bergen, Norway

Received February 25, 1969.