

SPACE OPERATIONS SYMPOSIUM (B6)  
Training Relevant for Operations (3)

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## PRACTICAL EXERCISES AS PART OF FLIGHT CONTROLLER TRAINING

**Abstract**

Operating the International Space Station as a Flight Controller is a highly complex and challenging endeavour, which requires not only excellent knowledge but also special skills on console. Flight Controller tuition is, therefore, not solely based on classroom lessons and reading material, but must also comprise operational sessions which ensure that the required practical skills are learnt. Flight Controller tuition at the Columbus Control Center in Oberpfaffenhofen/Munich reflects these training requirements and has already incorporated several elements in the training flow which serve these needs.

During classroom training blocks, some lessons are taught in a control room environment and are combined with practical exercises. Each week of training is concluded with a simulated practical session on console, which brings together many of the performance objectives taught during the week. In a later stage of Flight Controller training, the trainees participate in simulations which mimic the real operational environment to a high degree of fidelity.

In future, so-called Interconsole Exercises will be introduced to bridge the gap between the mainly theoretically oriented training weeks and the simulation phase. These practical exercises can be seen as mini-simulations, aimed at gradually qualifying the trainee to reach all the objectives required for on-console operations.

This paper describes the practical training efforts at the Columbus Control Center, details the methods used, and highlights their benefits and the related challenges for the instructors.