

C. SNS Day-One Target/Moderator Configuration, A. D. Taylor, RL

The objective in drawing up the target-station design is to maximize the utilization potential by providing a diversity of neutron-scattering instruments (~ 20) and by covering a wide range of neutron-spectral regions, for example:

- high intensity
- high resolution, at the expense of intensity
- long wavelength,  $\lambda > 4 \text{ \AA}$ .

Taking into account the space available in the experimental hall and the target geometry required to remove 350 kW of heat, the four-wing geometry illustrated in Fig. II-C.1 has been adopted as the day-one layout.

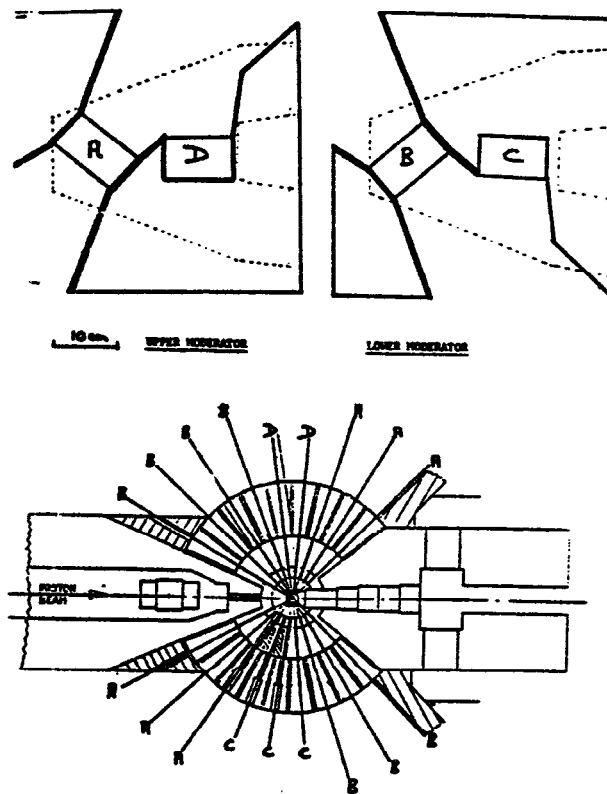


Fig. II-C.1. Initial beamline and moderator layout for SNS.