

Advanced Whole Air Sampler

Deployments

ACCLIP

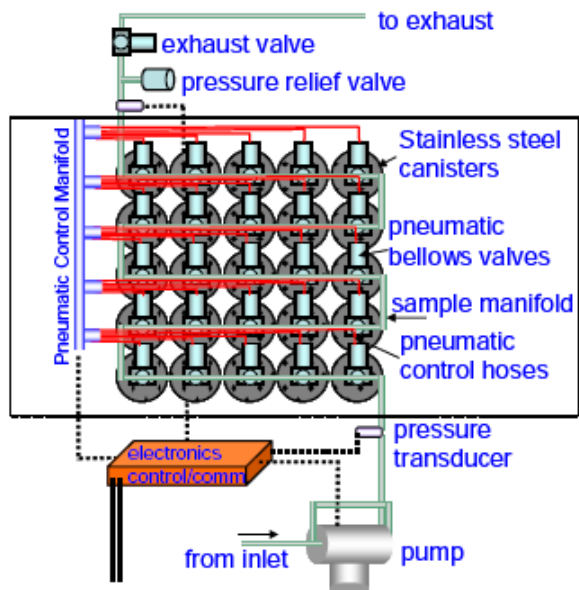
Short Name or Variable Name

AWAS

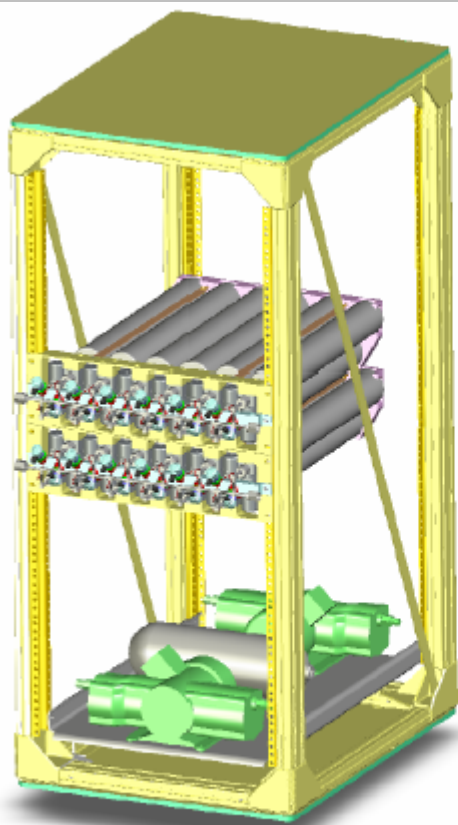
The Advanced Whole Air Sampler (AWAS) is an instrument for the collection of gas samples in canisters where the sample can be preserved for subsequent analysis using ground-based laboratory equipment. Samples can be collected on the command of an operator, and banks of canisters provide for multiple samples in one flight. Operation is as follows, as described in the Operating Manual:

Air is sampled from a suitable inlet through one or more compressor pumps into a sample manifold where previously evacuated cans are mounted. The current AWAS can hold up to 60 canisters (separated into 5 modules of 12 canisters each). Each canister is isolated from the manifold with an air-actuated valve; the manifold exhaust line also contains an automatic valve. On command from the computer controller (DSM), the exhaust valve is closed, and the manifold is pressurized to a pressure limit set by a manual relief valve in the exhaust manifold. Following this pressurization, the control program opens the next canister in line and then closes the

canister when manifold pressure reaches a pre-specified value. After a preset time, or on command from an operator, the next canister in sequence is filled until the predetermined maximum number of canisters are filled (or until the system is otherwise shut down).



Basic components of the whole air sampler



Whole air sample modules and pump/pneumatic plate in standard HIAPER rack.
Location of electronics control box TBD.

Primary External Contacts

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