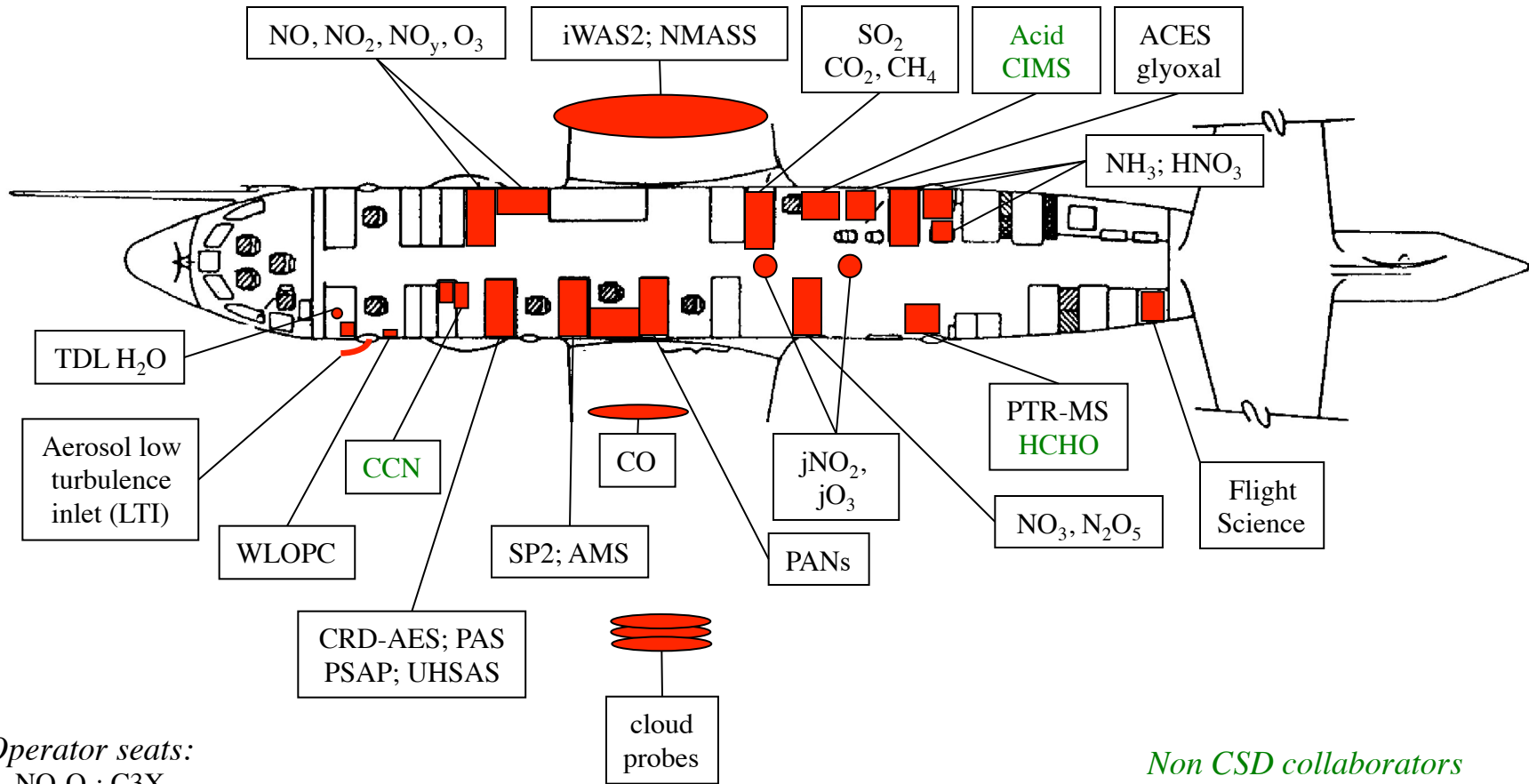


N42RF layout - SENEX 2013

NOAA-CSD version 4 11-09-2012



Operator seats:
 NO_yO₃: C3X
 CRDS: Sta. 2
 AMS: Sta. 3
 CIMS: Galley
 rotating: Galley

Non CSD collaborators
 CCN: Nenes
 HCHO: Hanisco/Keutsch
 Acid CIMS: Thornton

Location	Abbreviation	Full name	Description	PI	Affiliation
Sta. FD	TDL H ₂ O	Tunable Diode Laser water vapor	water vapor using open-path fast-response tunable diode laser absorption spectrometer	Dana Naeher	NOAA/AOC
Sta. FD	LTI	Low Turbulence Inlet	decelerating inlet to provide sample air to aerosol instruments in fuselage	Chuck Brock	NOAA/ESRL
Sta. FD & B cab.	WLOPC	White-Light Optical Particle Counter	supermicron aerosol number and sizes; samples from LTI	Chuck Brock	NOAA/ESRL
Sta. 2 forward	CCN	Cloud Condensation Nucleus counter	particle number that serve as a core for new cloud water droplets; samples from LTI	Thanos Nenes	Georgia Tech
Sta. 2	CRD-AES	Cavity RingDown-Aerosol Extinction Spectrometer	total dry aerosol light extinction and extinction as f(RH); samples from LTI	Justin Langridge	NOAA/ESRL
Sta. 2	PSAP	Particle Soot Absorption Photometer	total aerosol light absorption by filter darkening; samples from LTI	Dan Lack	NOAA/ESRL
Sta. 2	PAS	Photoacoustic Absorption Spectrometer	total aerosol light absorption by photoacoustics; samples from LTI	Dan Lack	NOAA/ESRL
Sta. 2	UHSAS	ultrahigh sensitivity aerosol size spectrometer	counts and sizes 0.07-1.0 μm aerosol particles; samples from LTI	Chuck Brock	NOAA/ESRL
Sta. 3	SP2	Single-Particle Soot Photometer	soot particles number, size, and coating	Joshua Schwarz	NOAA/ESRL
Sta. 3	AMS	Aerosol Mass Spectrometer	Size resolved chemical composition of aerosol particles; samples from LTI	Ann Middlebrook	NOAA/ESRL
Sta. C3X	NO/NO ₂ /NO _y /O ₃	nitrogen oxides and ozone	chemiluminescence detection with photolytic or catalytic conversion	Ilana Pollack, Tom Ryerson	NOAA/ESRL
Sta. 4	PAN CIMS	PeroxyAcyl Nitrate Chemical Ionization Mass Spectrometer	PANs using chemical ionization mass spectrometry with I ⁻ as reagent ion	Jim Roberts	NOAA/ESRL
Sta. 5	j-values	Filter Radiometers	j _{NO2} and j _{ozone} using filter radiometers	Gerd Hübler	NOAA/ESRL
Sta. 5	SO ₂	sulfur dioxide	SO ₂ using pulsed UV fluorescence	John Holloway	NOAA/ESRL
Sta. 5	CH ₄ , CO ₂	Picarro	CO ₂ and methane with IR laser absorption in a high-finesse cavity	Jeff Peischl, Tom Ryerson	NOAA/ESRL
Sta. 6a	acid CIMSs	acid Chemical Ionization Mass Spectrometer	organic and inorganic acids using chemical ionization mass spectrometry with acetate as reagent ion	Joel Thornton	University of Washington
Sta. 6b	ACES	Airborne Cavity Enhanced Spectrometer	Glyoxal using Cavity Enhanced Absorption Spectroscopy	Kyung-Eun Min, Bill Dube	NOAA/ESRL
Sta. 7	HNO ₃ CIMS	nitric acid Chemical Ionization Mass Spectrometer	nitric acid using chemical ionization mass spectrometry with SiF ₅ ⁻ as reagent ion	Andy Neuman	NOAA/ESRL
Sta. 7	NH ₃ CIMS	Ammonia Chemical Ionization Mass Spectrometer	Ammonia using chemical ionization mass spectrometry with the protonated acetone dimer as reagent ion	John Nowak	NOAA/ESRL

Dual passenger	CARDS	cavity ringdown absorption spectrometer	NO ₃ /N ₂ O ₅ in laser absorption in high-finesse cavities	Peter Edwards, Bill Dube	NOAA/ESRL
Sta. 8	PTRMS	proton transfer reaction mass spectrometer	various VOCs using chemical ionization mass spectrometer using NO ⁺ or H ₃ O ⁺ as reagent ion	Martin Graus, Carsten Warneke	NOAA/ESRL
Sta. 8	HCHO	Laser Induced Fluorescence	formaldehyde (HCHO)	Tom Hanisco, Frank Keutsch	NASA GSFC Univ. of Madison
AMPS pod	NMASS	Nucleation Mode Aerosol Size Spectrometer	0.004-0.07 nm aerosol particles number and size	Chuck Brock	NOAA/ESRL
AMPS pod	iWAS2	improved Whole Air Sampler With immediate Analyzes System	hydrocarbons, alkyl nitrates and halocarbons using canister samples for immediate GC-MS analysis	Jessica Gilman, Brian Lerner	NOAA/ESRL
CO pod	CO	carbon monoxide	CO using vacuum UV resonance fluorescence	John Holloway	NOAA/ESRL
LWS 485	cloud probes	Droplet Measurement Technologies cloud probes	cloud droplet physical properties using optical DMT probes	Chuck Brock, Dana Naeher	NOAA/ESRL, NOAA/AOC

SENEX Principle Investigator	Joost de Gouw	Joost.deGouw@noaa.gov	NOAA/ESRL
Aircraft Instrument Coordinator	Carsten Warneke	Carsten.Warneke@noaa.gov	NOAA/ESRL
Pod Installation Coordinator	Chuck Brock	Charles.A.Brock@noaa.gov	NOAA/ESRL
New Investigator Contact	Jim Roberts	James.M.Roberts@noaa.gov	NOAA/ESRL