

Proposed VLA-VHF receiver system

Staffing

Requirements at SAO Receiver Lab (Design, Construction, Testing)

Engineers and Technicians: (3) E. Tong, R. Kimberk, S. Leiker

Students: (1) doctoral (BU) with experience building the Haystack 327 MHz array;
additional students with engineering background as required/available

Requirements at NRAO

One SAO staff member (Kimberk or Leiker, alt. Barrett) is available on a rotating basis to support activities at the VLA site as needed during the testing phases of the program.

Single dish activities

Installation/testing unit 1

1. Checkout after delivery: 1 engineer-day
1 SAO staff-day
2. Prep/plan installation: 1 engineer-day
1 SAO staff-day
3. Adjs. to online system: 0.5 person-day
4. Installation: 2 FE technician-days
2 antenna technician-days (cherry picker)
SAO staff
5. Testing: 1.5 Carilli-weeks
4 Perley-days
2 Greenhill-weeks (on site as required/practical)

Single baseline activities

Installation/testing unit 2

1. Checkout after delivery: done in parallel with unit 1
2. Installation: 1 FE technician-day
2 antenna technician-day (cherry picker)
1 SAO staff-day
3. Correlator: 1 s/w engineer-day (contingency)
4. Testing: 1 Carilli-week
2 Perley-days
1 Greenhill-week (on site as required/practical)

Sub-array (4 antenna) activities

Installation/testing units 3 & 4

1. Checkout after delivery: 0.3 engineer-day
0.3 SAO staff-day
2. Installation: 2 FE technician-days
2 antenna technician-days (cherry picker)
2 SAO staff-days
3. Correlator: 0.5 s/w engineer-day (contingency)
4. Testing: 2 Carilli-weeks
4 Perley-days
1 SAO staff-week

Full array deploymentFull installation over ~ 5 months in preparation for 2005 D-configuration.

1. Checkout after delivery: 8 engineer-days
8 SAO staff-days
2. Installation: 14 FE technician-days
14 antenna technician-days (cherry picker)
3. Testing: 1 Carilli-month
1 Perley-week
1 SAO staff-month