VLBA PROPOSAL COVERSHEET

rcvd:

DEADLINES: 1st of Feb., June, Oct.
EMAIL TO: proposevn@HP.mpifr-bonn.mpg.de
OR MAIL TO: EVN Scheduler, MPIfR, Auf dem Hugel 69, D-53121 Bonn, Germany
EMAIL TO: propsoc@nrao.edu
OR MAIL TO: Director NRAO, Edgemont Rd. Charlottesville, VA 22903-2475, USA

(1) Date Prepared: December 3, 2003

(2) Title of Proposal: **Calibrator Search in the SIRTF First-Look Survey**

(3) AUTHORS (Add * for new location)	INSTITUTION	E-mail	G/U	Students Only For Thesis?	Ph.D. Year
J.M. Wrobel	NRAO	jwrobel@nrao.edu			
M.A. Garrett	JIVE	garrett@jive.nl			
J.J. Condon	NRAO	jcondon@nrao.edu			
R. Morganti	ASTRON	morganti@astron.nl			

(4) Related previous or current VLBI proposal(s): BG125, GG053 ○ Resubmission

(5) Contact author for scheduling: J.M. Wrobel
Address: NRAO
P. O. Box O
Socorro, NM 87801

(6) Telephone: 1 505 835 7000
Fax: 1 505 835 7027

(7) Scientific Category: ⊗ astrometry & geodesy ○ galactic ⊗ extragalactic ○ other:
Rapid Response Science: ○ Known Transient ⊗ Exploratory ○ Target of Opportunity

(8) Wavelength(s) requested (those not available on the global network are indicated with a small circle):
○ 90cm ○ 50cm ∘ 30cm ⊗ 21cm ○ 18cm ○ 13cm ○ 6cm ∘ 5cm ○ 3.6cm ○ 3.6/13cm
∘ 2cm ○ 1.3cm ○ 7mm ∘ 3mm
○ Global Network standard bands ○ Special frequencies: As for BG125.

(9) Recording format: ○ Default continuum setup (VLBA only), ⊗ VLBA/MkIV, ○ MkIII: Mode ______
Bandwidth per BaseBand channel: 8
Aggregate bit rate: 256 (8 BB channels at 16 MSamples/sec of ○ 1 bit, ⊗ 2 bit)

(10) ○ Multi-epoch observation: ______ epochs of ______ hours each, separated by ______

(11) Network	Requested antennas	Total time requested
EVN & MERLIN		
VLBA	ALL except MK	5 hours
other NRAO		
Non-VLBI Intruments		

(12) ABSTRACT (Do not write outside this space. Please type)

We will conduct phase-referenced observations at 1.4 GHz, in the nodding style, of 20 candidate in-beam calibrators that are unresolved and stronger than 5 mJy at 1.4 GHz in the SIRTF First-Look Survey (FLS/VLA; Condon et al. 2003). The VLBA detections will help optimize strategies for our planned in-beam VLBI surveys of FLS/VLA sources stronger than 0.1 mJy. The VLBA detections will also help anchor the FLS/VLA survey to the ICRF.

Scheduler use only
(8/03)

(13) Observation type: ⊗ Interferometry, ◯ Spectroscopy, ◯ Pulsar, ⊗ Phase referencing

(14) Proposal is ⊗ Suitable ◯ Unsuitable for dynamic scheduling.

(15) Polarization: ◯ Single Polarization ⊗ Dual Circular Polarization
Global network standard for single polarization is LCP for all λs except 13cm (RCP) and 3.6cm (RCP).

(16) Tape usage (Show <recording time>/<total time>): ______

(17) Assistance required:
Observation Setup: ◯ Consultation, ◯ Extensive help, ◯ Observe file preparation
Postprocessing: ◯ Consultation, ◯ Extensive help, ◯ Calibration service

(18) Processor: ⊗ Socorro, ◯ JIVE, ◯ Haystack, ◯ Bonn, ◯ Washington, ◯ Other______________
Special processing: ⊗ XPol, ◯ Pulsar gate, ◯ Multiple Fields: ______
Averaging time: ________ Spectral channels per baseband channel: ________
◯ Other special processing: ____________________________________

(19) Postprocessing Location: NRAO-SOC

(20) Source list: ⊗ J2000 ◯ B1950
If more than 4 sources, please attach list. If more than 30, give only selection criteria and GST range(s)

	Source 1	Source 2	Source 3	Source 4
Name(s)	FLS/VLA sources	Phase Calibrator	Astrometric Check	Amplitude Check
RA (hh mm)	17 18 $\pm$1 degree	17 22	17 22	17 40
Dec (dd.d)	59 30 $\pm$1 degree	58 56	61 05	52 11
GST range (Europe)				
GST range (US)	22-03 h	22-03 h	22-03 h	22-03 h
GST range (Other)				
Band(s)	L	L	L	L
Flux density (Total, Jy)	0.005-0.160			
Flux density (correlated, mJy)		123 at S	126 at S	1990 at S
RMS needed (mJy/beam)	about 0.3			
Peak/RMS needed	15 or more			

(21) Preferred VLBI session or range of dates for scheduling, and why:
Correlation before January 15, to allow time to analyse data and prepare proposal for February 1.

(22) Dates which are NOT acceptable, and why:

(23) Attach a self-contained scientific justification, not in excess of 1000 words.
Preprints or reprints will not be forwarded to the referees.

Information about the capabilities of the VLBA may be found on the World Wide Web by starting at the NRAO home page, http://www.nrao.edu, and selecting the VLBA from "Sites and Telescopes."

A brief summary of the capabilities of the EVN antennas is given in the EVN STATUS TABLE in the EVN USER GUIDE, which may be found at http://www.evlbi.org/user_guide/user_guide.html.

Please include the full postal addresses for first-time users or for those that have moved (if not contact author).