
SDI-12 SUPPORT GROUP

SERIAL DATA INTERFACE AT 1200 BAUD

December 23, 1994

Minutes of the 1994 SDI-12 Technical Committee Meeting

The SDI-12 Technical Committee met on November 8, 1994, after the annual meeting of the SDI-12 Support Group. The following members of the technical committee attended:

Rick Billings (U.S. Geological Survey)
Ken Aquino (Setra Systems)
Gerald Calhoun (Sutron Corporation)
Terry Dickey (Hydrolab)
Terrell Fletcher (Design Analysis Associates)
Mike Jablonski (NR Systems)
Rick Lockyer (Handar)

The following attended as proxies for members of the technical committee not present at the meeting:

Rusty Munn (Campbell Scientific, proxy for Joe Thurston)
Russ Hanson (Paroscientific, proxy for Richard Wearn)

The following members of SDI-12 Support Group also attended:

Roger L. Himka (FCI Environmental, Inc.)
Antoine Mouline (Hydrologic)
Jack Hardee (South Florida Water Management District)
Hans Peter Vaterlaus (Rittmeyer Ltd.)

The first order of business was to elect a chairman. Rick Billings was elected and agreed to accept this position.

Three technical issues were discussed at the meeting:

- 1) a wild card address
- 2) a change address command
- 3) concurrent measurements

All three issues were discussed in detail. We ran out of time and decided to reconvene in January or

February of 1995 to continue discussion on all three topics. We did, however, reach the following conclusions:

1) We will conduct a survey of all SDI-12 members asking them to list each extended command that they have defined. The purpose of this survey will be to see if any letters of the alphabet remain unused and could thus be used as an SDI-12 Basic Command, without conflicting with any extended commands. We cannot, however, promise that a new SDI-12 command will not conflict with existing extended commands.

2) All new Basic SDI-12 Commands will be comprised of a single, upper case letter, possibly followed by digits.

3) We will recommend to all members of the SDI-12 Support Group that they use one of the following two methods to implement extended commands:

a) use lower case letters only in extended commands

or

b) prefix multiple upper case letters with an upper case X, for example: aXNNN!, where the X says an extended command follows, and NNN is the extended command

4) We will recommend that the following change address command be adopted:

Command	Response
aAb!	b<CR><LF>
a - the sensor address	b - the address of the sensor
A - the change address command	(will equal the new address, or the original address if the sensor is unable to change the address)
b - the address to change to	
! - terminates the command	
	<CR><LF> - terminates the response

5) We will recommend that the * character be adopted as the wild card address character. When an asterisk is used as the address character with the acknowledge active command (a!), the sensor will respond as if it is being addressed on the SDI-12 bus. For example, if a sensor detects *!, it will respond with a<CR><LF>, no matter what its address may be. This will allow a user to determine an unknown address of a sensor. (The user should understand that if more than one sensor is connected to the bus, they will all respond, causing a bus contention.) The committee felt that the *, rather than a \$ (as proposed by the Tavis Corporation) will best meet the needs of SDI-12 users, because the asterisk character is a widely used wild card character.

It was felt that we could deal with upgrading the Specification to deal with the change address command and the wild card address quickly (Version 1.2?), but that the concurrent measurement command may take more time (Version 1.3?). We will continue discussion on items at our next meeting (to be held in January or February of 1995). It was felt that a draft (e.g. straw man) description of a concurrent measurement command should be written prior to that meeting.

SDI-12 SUPPORT GROUP

SERIAL DATA INTERFACE AT 1200 BAUD

December 15, 1994

Minutes of the 1994 SDI-12 Support Group Meeting

The annual meeting of the SDI-12 Support Group was held on November 8, 1994 at the Fairmont Hotel, in Chicago, Illinois. A list of those who attended the meeting is included with these minutes.

Mike Jablonski, of NR Systems, Inc., chaired the meeting. Items discussed at the meeting include:

- review of activities since the last meeting of the SDI-12 Support Group
- financial report
- selection of officers for the SDI-12 Support Group
- discussion of the Bylaws of the SDI-12 Support Group
- selection of nine people to serve on the SDI-12 Support Group technical committee
- discussion of proposed changes to the SDI-12 Specification

Mr. Jablonski opened the meeting by thanking all present for attending and introduced himself as the Secretary of the SDI-12 Support Group. Mr. Jablonski then reported that Lew Ross (Sutron Corporation), the Chair of the SDI-12 Support Group, decided not to seek re-election for 1994-95. Lew was thanked for his years of service to the SDI-12 Support Group and was recognized as one of the founders of the SDI-12 Support Group.

Activities Since the Last Meeting

Mr. Jablonski reported that over 30 companies had requested a copy of the SDI-12 Specification and information about the SDI-12 Support Group since September 1, 1993. These companies do not have SDI-12 products and are considering the use of SDI-12 in new products.

Version 1.1 of the SDI-12 Specification was completed in July of 1994. This was done after review by the SDI-12 technical committee and other members of the Group that submitted comments on drafts of this document. A copy of this document was mailed to each member of the SDI-12 Support Group.

An SDI-12 Support Group newsletter was published in the fall of 1994. Mr. Jablonski explained that only one newsletter was published since the 1993 meeting due to a lack of articles submitted by the membership.

Financial Report

Mr. Jablonski reported that the SDI-12 support group had a bank account balance of \$ 4,652.21, with liabilities of approximately \$ 925.00 owed to NR Systems for postage and production of the Fall 1994 newsletter.

Election of Officers

Mike Jablonski, NR Systems, Inc., was nominated and elected as the Chair of the SDI-12 Support Group. Katie Lockyer, Handar, Inc., was nominated and elected as the Secretary of the SDI-12 Support Group.

Bylaws

After the election of officers, procedural issues for the operation of the SDI-12 Support Group were discussed. Four motions were made and passed, by vote, by those in attendance at the meeting.

Motion 1. At future meetings of the SDI-12 Support Group, the SDI-12 technical committee will meet at least 24 hours prior to the general meetings, and will present an analysis of any technical issues discussed by the technical committee at the annual meeting. The reason for this is to make the SDI-12 Support Group meeting as productive as possible. This way, the technical committee will be prepared to present a detailed analysis of any proposed changes to the SDI-12 Specification at the annual meeting.

Motion 2. Proposed changes to the SDI-12 Specification will be discussed at the annual meeting. Each member of the SDI-12 Support Group will receive a ballot used to vote on the change within 30 days of the annual meeting. A response will be due back within 30 days. If a two-thirds majority of those who return a ballot vote in favor of a proposed change, that change will be officially adopted by the SDI-12 Support Group. SDI-12 members that do not return a ballot will be considered non-responsive and will not have further opportunity to vote on the proposed change.

There will be no appeal process. If a change is accepted by a two-thirds majority, the SDI-12 Specification will be changed without further discussion.

Motion 3. Definition of a quorum--it was decided that whatever number of SDI-12 Support Group members attend the annual meeting constitutes a quorum. Business will be conducted at each meeting of the SDI-12 Support Group, regardless of the number of people in attendance.

Motion 4. The Bylaws were discussed in detail. Mike Jablonski proposed several changes to the Bylaws which were submitted, but never formally adopted, at the 1993 SDI-12 Support Group meeting. Motion number 4 called for revising the bylaws, in writing, and sending a copy to each member of the SDI-12 Support Group. Each member will have 30 days to review the bylaws and vote yes or no for their acceptance. If two-thirds of those who return the ballots vote yes, the bylaws will be formally adopted by the SDI-12 Support Group.

Proxy Votes

It was decided that proxy votes will not be accepted for motions voted upon at the annual meeting of the SDI-12 Support Group. In other words, if no representative of a company is able to attend the annual meeting of the SDI-12 Support Group, then no other person can represent that company to cast a proxy vote on any motions.

For the SDI-12 Support Group technical committee, however, it was decided that proxy votes will be accepted, but can only be cast by a person who is physically present at the meeting and who is attending the meeting

to represent a member of the technical committee who is not present at the meeting.

Technical Committee

The following nine people were selected to serve on the SDI-12 Support Group technical committee:

Ken Aquino (Setra Systems)
Rick Billings (U.S. Geological Survey)
Gerald Calhoun (Sutron Corporation)
Terry Dickey (Hydrolab)
Terrell Fletcher (Design Analysis Associates, Inc.)
Mike Jablonski (NR Systems)
Rick Lockyer (Handar)
Joe Thurston (Campbell Scientific)
Richard Wearn (Paroscientific)

Proposed Changes to the SDI-12 Specification

The meeting adjourned and a meeting of the technical committee followed to discuss proposed changes to the SDI-12 Specification, submitted by the Tavis Corporation. (The minutes for this technical committee meeting are in a separate document, dated December 15, 1994.)