

ASSA Instrumentation Section Report – July 2018

Activities of the Instrumentation Section largely revolve around communication, outreach, guidance and education, plus the important aspect of encouraging people in the pursuit of their personal instrumentation projects. There is no drive to formally induct members into the Section. Rather, the approach has been to address ASSA members' ad-hoc needs for information on a case by case basis.

In support of the Society's general communication efforts, which equally support the instrumentation Section's goals, the following activities are ongoing:

- Moderate the ASSA FaceBook page
- Moderate the Yahoo! Group mail lists
- Moderate the Telescope Making SA FaceBook page

The Section directly supports the needs of both ASSA members and the general public regarding selection, construction, purchase, maintenance and use of instrumentation. This is mostly done via the Amateur Telescope Making (ATM) class, the Telescope Making SA FaceBook page, e-mail correspondence, telephonic discussion, and ScopeX.

The distinctly South African "Telescope Making SA" Facebook group attracts members from around the world. International involvement produces an energetic flow of ideas, information, technical assistance and encouragement. Some of the (at times unusual) approaches to instrumentation developed locally have, after being highlighted in this medium, been favorably received and copied abroad. Prospective members are vetted prior to admitting them to the group and appropriate behaviour is gently but firmly enforced. The Telescope Making SA FaceBook page currently has **728** members, an increase of 77 over the last year. An analysis of activity over the 60 days prior to this report is given below for interest.

The ATM class has been continuously active since mid-1991. It attracts a steady stream of newcomers to the art, with a good success rate of people finishing their first instruments. In addition, after completion of their first telescope, a fair number of participants stay on or return in order to tackle more advanced projects. Members come and go according to their needs and available time, work at their own pace on individual projects, and sometimes return after a long hiatus dictated by personal circumstances. The class is run informally in a flexible manner to accommodate the vagaries of members' lives. Consequently, there is no way to ascertain the actual numbers of people or projects engaged in at any one time. Membership of ASSA, whilst encouraged, is not a prerequisite for participation in the ATM class. A class register is kept as an indication of activity levels, but signing it is not enforced. Since 2005, participants are required to sign an ATM class Manifesto, which set out ground rules and expectations for all parties and includes an indemnity statement. As of July 2018, **291** participants have been recorded (which excludes casual visitors). We are pleased to have been joined by an experienced telescope maker from Japan, who has just started work on the f/3 primary for an 8" Cassegrain.

ScopeX, which grew out of the ATM class, has had 16 successful annual events since its inauguration in 2002. In addition to the primary goals of general astronomy outreach and publicizing the Society, ScopeX provides a platform for the telescope making community to exhibit their work and thereby encourage newcomers to engage in this fascinating hobby. Having a plethora of instruments at one place enables visitors and members alike to see, touch, compare and even use a variety of instruments - both commercial and amateur-built or modified. This sparks discussion of ideas, approaches and relative merits, enabling people to make informed choices. ScopeX reports are published separately. The 2017 event was for various extrinsic reasons somewhat quieter than previous events, but the visitor engagement appeared to be much more focused, indicating that most visitors had a true interest in astronomy/science. ScopeX 2018 is scheduled for 15 September, with the theme of "Space Weather".

Apart from ScopeX, only one communal project has been initiated within the Section, i.e. construction of a highly portable but rugged telescope for donation to SciBono at ScopeX, which is still underway. However, expertise, materials and useful components are freely shared for individuals' projects – including Clyde Foster's asteroid occultation participation. Percy Jacobs has completed two advanced projects (a spectroscope with a 3D-printed body and a Ha solar scope), with which he is contributing to international science projects. An article on the Director's a portable telescope and camera control system for astrophotography was published in MNASSA. Finally, the Director attended the 2017 Stellafane convention in Vermont, USA, as an invited speaker and a judge for the advanced optics category. Stellafane, which is approaching its centenary, is widely regarded as the Mecca of telescope making. The presentation, together with several exhibits of South African approaches to problem solving, were generally well received, attracted a fair amount of attention and were commended by the mechanical category judges.

Telescope Making SA FaceBook page – Membership distribution

The group has thus far attracted **728 members** from **101 towns/cities** in **76 countries**.

Total members

Jul 22, 2017-Jul 21, 2018

728 Members



728
Total members

Top countries		Top cities	
South Africa	244	Cape Town, Western Cape	49
United States	104	Pretoria, Gauteng	42
India	70	Johannesburg, Gauteng	33
Brazil	45	Bangalore, Karnataka	10
United Kingdom	21	São Paulo, São Paulo (state)	10
Indonesia	18	Centurion, Gauteng	9
Pakistan	11	Durban, KwaZulu-Natal	8
Canada	11	Randburg, Gauteng	8
Philippines	10	Chennai, Tamil Nadu	6
Bangladesh	10	Pune, Maharashtra	5

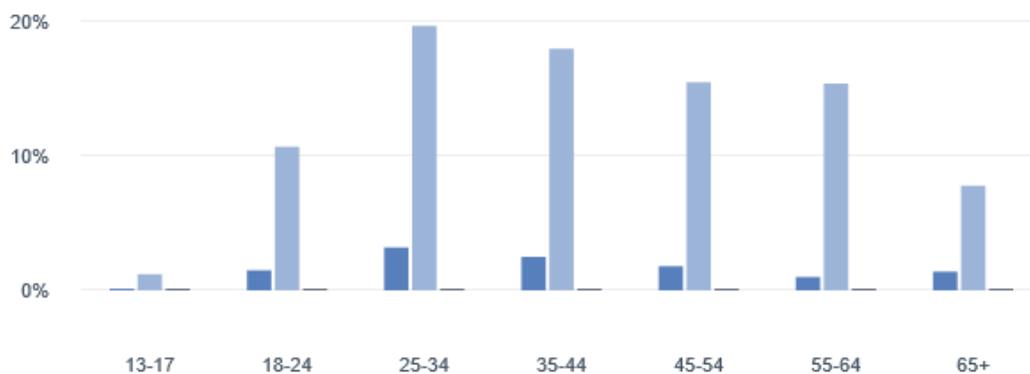
The countries from which our membership is drawn are as follows, listed by decreasing numbers of people from each country.

South Africa	Egypt	Japan	Malaysia
United States	New Zealand	Thailand	Mozambique
India	Sri Lanka	South Korea	Eritrea
Brazil	Portugal	Sweden	Chile
United Kingdom	Netherlands	Namibia	Cuba
Indonesia	Hong Kong	Bulgaria	Costa Rica
Pakistan	Turkey	Ethiopia	Bahrain
Canada	China	Argentina	Austria
Philippines	Colombia	Lebanon	Israel
Bangladesh	Spain	Greece	Nepal
Nigeria	Singapore	Iraq	Afghanistan
Vietnam	Ireland	Norway	Yemen
Italy	Saudi Arabia	Iran	Tanzania
France	Myanmar (Burma)	Madagascar	Tunisia
Mexico	Zambia	Lithuania	Romania
Belgium	Kenya	Morocco	Venezuela
Australia	Croatia	Czech Republic	Russia
Germany	Ukraine	Malta	Slovakia
Algeria	Uganda	Mauritius	Zimbabwe

Telescope Making SA FaceBook page – Demographics

Age and gender ?

11.5% Women 88.2% Men 0.3% Custom



11.5%
Women
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Custom

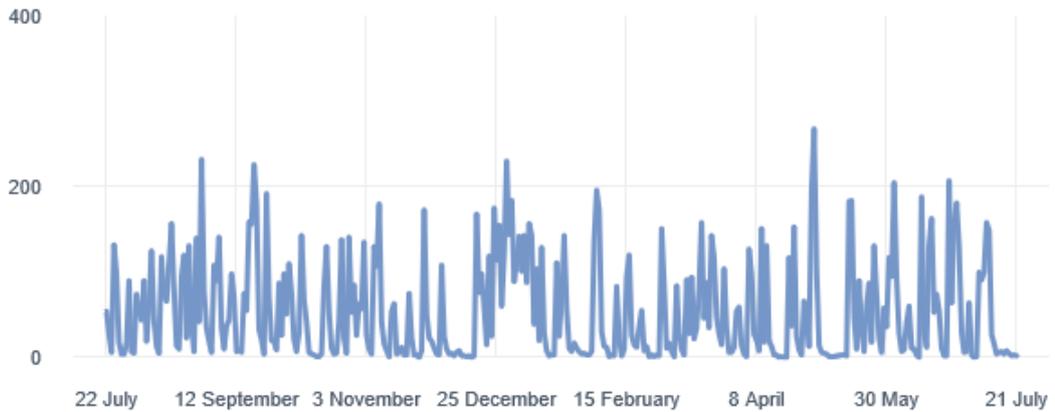
The number of young people and the proportion of women involved bode well for the long-term continuation of the art of telescope making.

Telescope Making SA FaceBook page - Engagement

Active members ?

Jul 22, 2017-Jul 21, 2018

465 Members

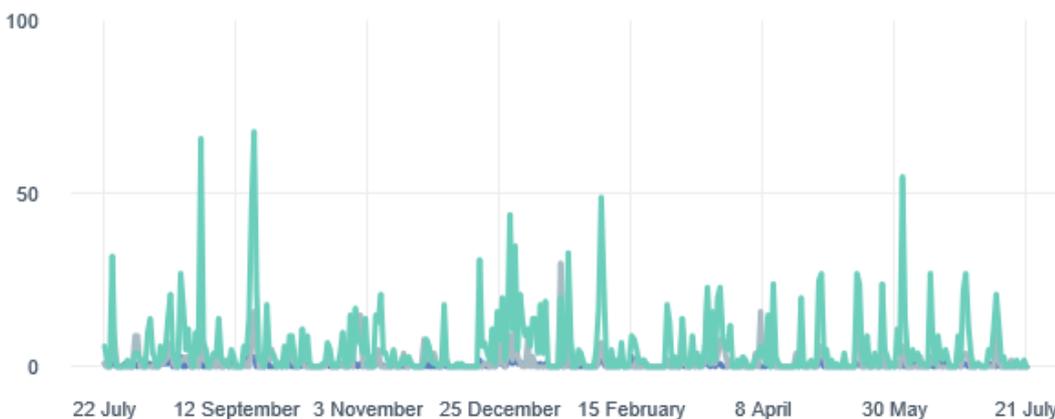


465
Active members

During the last year, 465 members have interacted on the page, 158 new items have been posted, 581 comments have been written, and a further 2113 reactions recorded, for a total of **2862 interactions**.

Jul 22, 2017-Jul 21, 2018

158 Posts **591 Comments** **2.1K Reactions**



158
Posts
591
Comments
2,113
Reactions

This indicates a continuing healthy level of activity.

--- Chris Stewart