

non-ESO telescopes on La Silla, all cases where no reduction can be done with REDUC. The need for more flexibility in the programme was also expressed by several users.

The basic approach of REDUC, a set of subprogrammes dedicated each to one particular photometric system, makes it rather cumbersome to modify it to accept new standard systems, and impossible for user-defined ones. It was therefore decided to try and write a new programme wherein the system structure, i.e. the way magnitudes or measurements in a filter are transformed to the colour indices system, would be defined in a matrix representation. Also needed in that scheme are symbolic arrays that are used to store the shape of the colour transformation equations, the expression of the extinction coefficients (their possible dependence on one of the colours). Usual systems such as UBV, VRI, UBVR, uvby, VBLUW, H-Beta are then particular cases and standard values for the previously mentioned matrices and arrays can be simply loaded by specifying the name of the photometric system and telling the programme that the standard procedures for colour transformation and extinction computation will be followed. This means for instance that the colour equations have the form most often found in the literature, that colour-dependent

extinction coefficients, if any, are not computed but are given standard values . . . Different weights can be given to the measurements used for the least-squares fitting of the coefficients. When the system is a non-standard one or when the default procedures for a standard system are felt not to be adequate, the user has to fill in part or all of the matrices and arrays. Graphic displays help the user to search for systematic effects like drift, non-linear colour transformation equations, errors correlated with the position of the telescope, wrong dead-time correction, etc.

More information on the possibilities of the programme can be found in a first version of the User's Manual, available on La Silla.

The new programme has already been in use for several months and is being improved thanks to constructive remarks coming from the users, helping to enlarge the original definition of main goals and features outlined with the cooperation of Patrice Bouchet and Christian Perrier, from the ESO staff. It is to be hoped that through that feedback from the visiting astronomers, the photometric reduction service on La Silla will further increase in quality, for the benefit of the whole users' community.

## Fire Brigade and Rescue Squad

by J. Peñafiel, ESO

An emergency is defined as an unforeseen combination of circumstances which can lead to danger of human life and to damage of property, requiring immediate action.

In order to be prepared for this "immediate action", two groups were formed by the safety engineer at La Silla: a fire brigade and a rescue squad. Whilst the tasks of the former group may be clear to everybody, the latter one's aim is to intervene in the case of technical accidents, e.g. a car accident.

Both groups consist of volunteers of the local personnel coming from various departments. The members are trained for the multiple difficult situations, which might occur during an emergency operation at our observatory. They acquired general knowledge about the development of fire and the strategies of its combat in the first group and about situations in which confined persons are to be released during accidents of traffic, snow or earthquakes in the second group. They all know how to handle a case of first aid and how to transport unconscious, injured or panic-stricken persons.

All training is done in simulated cases, mock fires of combustible material and inflammable liquids existing at the observatory were attacked and extinguished with the adequate means: water, foam, powder. The operation of the fire-fighting truck and the handling of its various equipment is frequently rehearsed. Practical exercises and theoretical lessons are organized once per month. The rescue squad is trained continuously in first aid and the use of their tools as saws, tongs, rigging and jacks. You certainly saw their brown vehicle at the Pelicano air strip.

Up till now there were fortunately only very few real and serious cases of emergencies, but during these the groups have proved their efficiency in "immediate actions".

Here are two examples of activities of the rescue squad:

**August 25, 1980:** 15 hours snowfall. The rescue squad cleaned roads, saved vehicles caught by snow or mud, towed the bus with personnel through a miry part of the road, searched the buildings for isolated persons and brought them to the hotel.

**January 4, 1982:** 14.40 h: a car Renault R4 leapt off the road 300 m before the gate at Pelicano. The rescue squad led the two injured passengers to the porter-house and administered first aid until the arrival of the ambulance.







**An early photograph of Santiago.** This picture was taken around 1905 from the Manuel Foster Observatory of the Catholic University (Cerro San Cristobal) by Dr. William H. Wright, director of the Observatory.

It shows the eastern part of Santiago and, more precisely, the site of the suburb of Las Condes. On the right is the Cerro San Luis (3) with, on its left, the Vitacura crossroad from which starts the President Kennedy avenue (5) and the Vitacura avenue (4). The small mountain on the left (1) is the Cerro Albarado (1,026 m). The line of poplars (2) along the rio Mapocho shows the present-day tracing of the Avenida Andres Bello (ex Costanera).

The location of the ESO offices is shown by the arrow. (Photograph communicated by M. Gaston Le Cerf from the "Pontificia Universidad Católica de Chile - Observatorio Astrofísico Manuel Foster and M. Patrice Bouchet, ESO-La Silla.)

**Una temprana fotografía de Santiago.** Esta fotografía fue tomada alrededor del año 1905 desde el Observatorio Manuel Foster de la Universidad Católica (Cerro San Cristóbal) por el Dr. William H. Wright, director del Observatorio.

Muestra la parte oriente de Santiago y particularmente la zona de la comuna de Las Condes. A la derecha se encuentra el Cerro San Luis (3) a cuya izquierda aparece el cruce de Vitacura donde nacen las avenidas Presidente Kennedy (5) y Vitacura (4). El pequeño monte a la izquierda (1) es el Cerro Albarado (1026 m). La avenida de álamos a lo largo del río Mapocho muestra el trayecto de la actual avenida Andrés Bello (ex Costanera). La ubicación de las oficinas de ESO está indicada por la flecha.

(Fotografía por gentileza del Sr. Gastón Le Cerf de la "Pontificia Universidad Católica de Chile - Observatorio Astrofísico Manuel Foster y Sr. Patrice Bouchet, ESO La Silla.)

## Italia, país miembro de la ESO

Con fecha 24 de Mayo de 1982 el embajador de Italia en París hizo entrega del documento de afiliación en el Ministerio de Relaciones Exteriores Francés, acto requerido según el art. 13 de la Convención de ESO, que atestigua la afiliación de Italia como país miembro.

Es el deseo que esta nueva afiliación de Italia no sólo satisfaga los anhelos de astrónomos y astrofísicos italianos quienes desde ahora tendrán acceso a observaciones ópticas en el hemisferio austral, sino que también contribuya al refuerzo de la Organización y al aumento de su rol básico del desarrollo de la astronomía europea.

## Cuerpo de Bomberos y Grupo de Rescate

por J. Peñafiel

Una emergencia es una combinación imprevista de circunstancias que podrían dar por resultado peligro para la vida humana o daño a la propiedad, que requiere una acción inmediata.

Con el propósito de estar preparado para esta "acción inmediata", el Ingeniero de Seguridad en La Silla formó dos grupos de voluntarios: Cuerpo de Bomberos y Grupo de Rescate. Mientras las funciones del Cuerpo de Bomberos parecieran conocidas de todos, las del Grupo de Rescate son intervenir en caso de accidentes propios del trabajo, e.g. accidente de vehículo.