THE ROYAL ASTRONOMICAL SOCIETY OF CANADA 1991 SOLAR ECLIPSE EXPEDITION INFORMATION CIRCULAR

At its meeting in January 1989, the National Council of The Royal Astronomical Society of Canada established a Solar Eclipse Committee for the purpose of organizing a national solar eclipse expedition to Baja California, Mexico to observe the great eclipse of 11 July 1991. Michael S.F. Watson, an experienced astrophotographer and veteran of six previous solar eclipse expeditions, was appointed Committee Chairperson and Expedition Leader. Mr. J. Randy Attwood, former President of the Toronto Centre of the RASC and another experienced eclipse observer and Mr. Steve Dodson, an astronomy educator with Science North in Sudbury, Ontario were named as Committee members.

The Expedition Concept

Because of the limited availability of accommodations and visitor facilities in Baja California Sur, and in order to keep the cost low and within the budgets of most families, the Committee decided to make the Expedition a short-two day trip, involving one night's accommodation in Mexico. Baja California was chosen as the location in preference to Hawaii or the Mexican mainland because of the superior weather prospects and because of the long duration of totality. The Committee decided to arrange for a charter aircraft rather than to travel by commercial airlines in order to provide the maximum flexibility and in order to allow eclipse participants to bring telescopes on the trip.

The Itinerary

Precise, final details of the eclipse trip will not be formulated until the spring of 1991. Nonetheless, most of the major details have been established, as follows. The Expedition aircraft, probably a DC-8, will leave Lester B. International Airport in Toronto early on the morning of Wednesday, 10 July 1991, the day before the eclipse. The aircraft will fly directly to the resort of Puerto Vallarta on the Mexican mainland. The travel agent that is assisting us with the Expedition, Sunquest Travel of Toronto, has made hotel reservations in Puerto Vallarta for that evening. We will arrive in Puerto Vallarta in early to mid-afternoon, with the balance of the day at leisure for participants. One meal will be provided aboard the aircraft and participants are responsible for the balance of the meals during that day. A conference and seminar will be held in the hotel that evening, with talks on a variety of subjects, including a slide show on Baja California, details of the eclipse, and observing and photography tips.

We will arise early on eclipse morning, have breakfast at the hotel and travel by bus to the Puerto Vallarta airport,

where our aircraft will take the short one-hour flight from Puerto Vallarta to the Los Cabos airport in Baja California Sur. Arrival at the Los Cabos airport will be between 06:00 and 07:00. Because all of our astronomical equipment will have remained on the aircraft overnight in Puerto Vallarta, we will be required to clear customs at the Los Cabos airport. For this reason, a complete list of makes, models and serial numbers of all telescopes and video cameras being brought by the Expedition must be provided to the Mexican government officials approximately a month before eclipse day.

At the Los Cabos airport we will be met by eight airconditioned buses, equipped with washrooms. These buses have been
reserved through a Mexican bus company and a contract will be
signed in July 1990. The buses will then depart the Los Cabos
airport, and drive north some forty kilometres, stopping at a
marker denoting the Tropic of Cancer before turning into the small
town of Santiago which is located about five kilometres south of
the centre line of the eclipse. Our observing site, which was
picked from among dozens available during a site preview trip in
July 1989, is a large, flat and superbly located soccer stadium in
Santiago, which is more than capable of accommodating all of our
Expedition. Several back-up sites in the immediate area have also
been chosen, should any difficulties arise on eclipse day. The
soccer field has a covered grandstand, to provide shade while we
wait for the eclipse.

We plan to arrive at approximately 09:00, to set up our equipment during the next hour and one-half, to watch the partial phases of the eclipse and then to experience 6 minutes 57 seconds of totality (just one second short of the maximum for this eclipse) just before noon local time, with the sun standing at an altitude of 83°. We will be bringing box lunches that will have been prepared for us by the hotel in Puerto Vallarta and we anticipate that cold drinks will be available from local merchants.

Following termination of the partial phase of the eclipse, we will pack our equipment, re-board the buses, and leave Santiago. The exact time of the aircraft's departure from Baja California has not yet been determined. Further, it may well be that we will leave from the La Paz airport rather than from the Los Cabos airport for logistical reasons. These details remain to be worked out, but we foresee no difficulty. In all likelihood the aircraft will leave in mid to late evening, fly overnight, and land in Toronto early on Friday morning, 12 July 1991.

The Cost

Because of the nature of the Expedition we are able to offer a very reasonable price. The estimated cost of \$1,000 Cdn. (\$1,000 U.S. for those who are joining us from the U.S.A.) covers the cost of the return flight, hotel accommodation in Puerto Vallarta, bus transfers to and from the Puerto Vallarta airport, meals aboard the aircraft, breakfast and box lunch for eclipse day

and the use of the observing site in Santiago. The price of the Expedition will also cover all incidental expenses such as site preview trips, postage and long distance telephone, an eclipse banner and two photographs to be provided to each participant, one being a group photograph and one being a high quality photograph of the eclipsed sun.

In order to reserve a place on the Expedition, a deposit of \$100.00 payable to The Royal Astronomical Society of Canada must be sent to the following address:

RASC 1991 Solar Eclipse Expedition
Toronto, Ontario

The deposit is fully refundable until 31 August 1990. Any cancellation following that time will result in forfeiture of the deposit.

The balance of the price of the Expedition will be payable in two instalments, the first in January 1991 and the second in March 1991.

Equipment and Personal Effects to be Taken

Because of the very warm weather to be encountered in Mexico and because the Expedition is of such a short duration, each participant will be permitted to take only minimal clothing (extra t-shirt, shorts, underwear and socks, bathing suit, etc.). Members of the Expedition will be permitted to take telescopes, probably without restriction, together with video, still and movie cameras and other necessary observing equipment such as binoculars and tripods.

Possibility of Cancellation

The Solar Eclipse Committee has been hard at work during the past year and one-half with our travel agent, with our carrier, Worldways Airlines of Toronto, and with the Mexican government officials. Two site preview trips to Baja California have now been completed (one in July 1989 and one in June 1990), and all of the logistical details are being settled quite satisfactorily. As with any enterprise such as this, however, every registrant must understand that there is some prospect, however slight, that an insurmountable problem may arise in the future that could conceivably result either in a drastic alteration of our plans or in cancellation of the Expedition in its entirety. While we do not anticipate any such occurrence, it is possible.

In particular, no charter airline will give a final commitment as to the availability of an aircraft until the spring of 1991. While Worldways Airlines has indicated to us that it foresees no difficulty in providing an aircraft, the Society has

different than any other expedition that is using charter transportation.

As a result of the foregoing, each Eclipse participant will be required to sign a comprehensive release in favour of the Society and all of its members, including the Solar Eclipse Committee, releasing them from all claims with respect to the Expedition, including any claims with respect to any ultimate cancellation of the Expedition.

Michael S.F. Watson
Expedition Leader
RASC 1991 Solar Eclipse
Expedition

Toronto, Ontario

(416) (Business) (416) (Residence)