Dear Hap:
The trip to Macquarie Island was quite short, ifte days down, six days there and five days back. They usually spend two weeks or more there, but this time the trip was made very short because of the muoh delayed gtant and the denire to reload the Thala Dan and set off again for Wilkes and Davis on the Antarctic continent. The Thalin Dan is a good ship with plenty of fine Danish food and I enjoyed the trip.

Unfortunately the setup at Macquarie is a poor second rate affair. It is there first station entablished in 1947. Presently their main internstes are on, the continent at Wilkes, Davis and kewson. Consequently, Haequaxie gets small attention. It seems that the Rusgian paid a Fisit to Maequarie a year ago and then went over to Mew Zealand where they reported that Mracquarle was the worst antaratie slop they had seen"! Either thig appraisal has not gotten back to the management or else they don*t case.

Actually Hacquarie is not a oold place the average daily minimur texperatures are $34^{\circ} \mathrm{F}$ in winter and $40^{\circ} \mathrm{F}$ in gummex. The average daliy maximum are respegtively $48^{\circ}$ F and $46^{\circ}$ F. The extremes in a dozen years are $17^{\circ}$ and $56^{\circ} \%$. It is beoause of this moderate climate that they oan get away with the shack they have. The worst feature is the very high relative humidity. Half the time it is abtubs and nine tenthe of the time it is above $70 \%$ with an averase of $88 \%$. Little provision has been made to heat the sheds and no proviaion has been made to dry tham out. Consequently the quartere are vary uncomfortable and conducive to various debiliating aches and paina.

On the staff are some biologists and rather mbalanced nature lovers. Some of thoir pets are the seala whiah are a kind of aea going pig. On the land they are plain IIIthy. Inntead of keeping these creatures at a decent diatance, they seam to want them orawling all over the place. these and the retting keip on the shore make the camp have mush the appearanee and odor of a hog yard. It is little wonder they hayd dificulty getting able men and that the geientific outpat is low.

Of the mix days there, I apent one day at the camp (plenty), one day on the ship and four daye at Grean Gorege, whi oh is a dozen miles below the comp at north end of ialand. I had one capable soottman as a helper. We lived in a niee littlo cabin at the edge of the beach. Unfortunately, it was dirty and run down lide all the rest of the plaoe. However, there were few seals present and very ilttie lelp. There ware four varieties of penguins and some other birds which were quite tame. Some could even be hendled if one was careful.

We wer fortunate in having ine weather and secured three good working days. Sawyer Valley was examined in some detail. Marking stakes were planted along the bottom and along the sast ridge. Nothing was done on went ridge due to lack of time. All the takes were suryeyed and found to be only vaguely oorreot. Much more effort is necesaary to determine the correot locations. Also considerable pick and shovel work is required at each anchor point to Iind the nature of the ground. Probably a month or aix weeks would have been necessary to do the job completely and right. In my last letter I mentioned staying until the Magga
 zany thinge needed.

Actually, Sawyer Valley in quite a auitable and feasible place to hang up long antennas and conduct long wave cosmic
static experiments. Up in the valley it is green and beautiful and shielded from the wind. There is an excellent clear fresh water creek with a flow of over 1000 cubic foot a minute all year around. The only wild life seems to be rabbits, weka birds (ike $a$ chicken) and Skua birds (ike a large hawk only web feet). The bottom of valley remains clear much of the time when clouds are blowing across the peak.

Upon my return, I drew up a memorandum on the whole affair at Green Gorge and Sawyer Valley with requests for improvements of facilities. I more or less expected somebody to get upset. Peculiarly enough, everything I asked was agreed to and I was invited to come back next year for a three month stay. I didn't thention north comp al they can rum that to suit themselves.

Phillip sim who is director said that I should supply him with a request for works to be done during the next four years. He would put it in the budget next May and probably be able to get it thin. I will have to think this over in some detail.

Tomorrow I leave for Tasmania where I will be moving about somewhat. However my mail address will be as on the back of this letter. I intend to dig up my old cables in the bottom of Johnson Valley to salvage what can be had. Also I will try to ligure out what needs to be done there af a more permanent setup. About three yearn from now I hope to have two installation in operating shape one at Kempton and the other at Maequarie. The two sites are quite similar and good comparative data should be possible thru the next solar activity minimum. Incidentally. I have found people here who recognize that tale til


