



ANTARKTIESE BULLETIN

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to
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tot
JUNIE



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Uitgegee deur die Suid-Afrikaanse Antarktiese Vereniging
Parklaan 32, Bordeaux, Randburg

Editor/Redakteur: D. G. Torr

Reader Opinion Poll

The Antarctic Bulletin is now in its seventh year and thirty issues have appeared so far. At this point we feel that it is time for us to take stock of the manner in which this publication is being received. We therefore ask all

readers to assist us by completing the form inserted in this issue and to return this to the editor (address given above). The outcome of this poll will be published in a future issue.

Photographic Competition

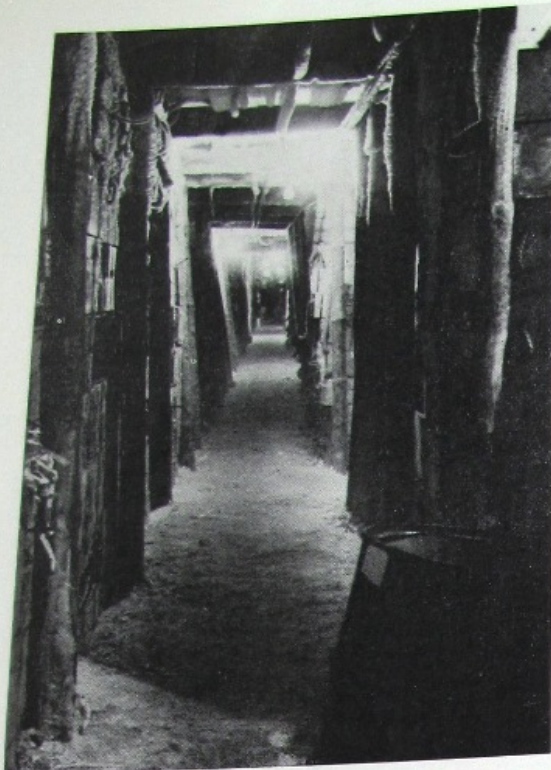
Many ex-SANAE members have returned to South Africa with striking photographs that would be of great interest to readers of this bulletin. We therefore invite the photography experts, and in fact anyone with unusual pictures, to send in black-and-white prints for consideration in our 'PRINT OF THE ISSUE' competition. The best

print received before each issue goes to press will be reproduced on the front page of the bulletin. Prints will be judged on the basis of photographic merit and general interest. Those submitted will not be returned and may be used in subsequent issues. Contributors are asked to supply some details of where, who and when.

Geboue in Antarktika en die rol van Brandbeveiliging

Suid-Afrika neem sedert 1959 deel aan die Antarktiese program, en was eers gehuisves in die ou Noorweegse basis, toe in die eerste Suid-Afrikaanse basis in 1962 en indien alles volgens plan verloop in die tweede basis aan die begin van 1971.

Die Departement van Openbare Werke is deur die Departement van Vervoer versoek om die beplanning, oprigting en die onderhoud van basisse in Antarktika op 'n verhaalbare grondslag te behartig wat tot op hierdie stadium moontlik was nieteenstaande die



The snow passage at Sanae as it appeared in 1963. (See Bulletin Vol. 2, No. 1, p. 3, 1970, which shows what typical buildings look like before they become covered over with snow).

probleem om altyd gewillige en geskikte personeel te kry om die taak te verrig.

Met die beplanning van die 1962 basis het Suid-Afrika geen ondervinding van boukonstruksie in Antarktika gehad nie en is daar met groot vrug van ander lande se ondervinding gebruik gemaak. Nadat alle moontlikhede ondersoek is, is daar besluit om die ontwerp te baseer op die Belgiese Koning Boudewyn-basis, met die nodige veranderinge om aan te pas by eie behoeftes.

Daar was sekere faktore wat oorweging moes geniet by die ontwerp van die basis.

- (a) onstabiele oppervlakte wat 'n fondament-druk kan neem van 4 tot 15 pd/vk.dm. afhangende van heersende temperatuur.
- (b) sneeu-ophoping van ongeveer 4 vt. per jaar;
- (c) die brandgevaar wat die grootste enkele gevaar in Antarktika is.
- (d) beperkte vervoergeriewe vir boumateriaal;
- (e) die gedrag van sekere boumateriale by sub-zero temperatuur.

Die basiese konstruksie van 'n gebou het uit die volgende bestaan:

- (a) 'n Houtwerkplattvorm op die sneeu wat as gewigsverspreidingsnetwerk kon dien waarop die hoofdrabalke moes rus.
- (b) Bo-op die drabalke is die vloerbalke gespasiëer op twee voet hart afstande.

- (c) Die res van die gebou is gekonstrueer met een-vormige panele wat vir die vloer, mure en dak gebruik is. Hierdie panele wat 8 voet \times 4 voet groot is bestaan uit 'n houtraamwerk van $2\frac{3}{4}$ " dik wat met $\frac{3}{8}$ " laaghout oorgetrek is. Die hol gedeeltes word dan met 'n goeie isolasie materiaal gevul.

Hierdie konstruksie het dus voorsiening gemaak vir moontlike beweging in die fondasie of enige ander uitwerking wat 'n soliede tipe konstruksie sou laat swig het. Ten einde voorsiening te maak vir al die kos en ander voorrade wat geberg moes word, asook om die verskillende geboue met mekaar te verbind, is 'n sneeuingang opgerig met rowwe pale en dakplaat bedekking bo-oor met die koskaste, dieseldromme en ander voorradekaste wat die mure gevorm het.

Die binnekante van alle mure is met 'n brandwerende verf behandel ten einde brandverspreiding tot 'n minimum te beperk, verder is 'n outomatiese koolstofdioksied brandblusstelsel in die kragkamer geïnstalleer waar 'n groot brandgevaar heers en ook omdat 'n brand in hierdie vertrek katestrofiese gevolge vir 'n ekspedisie sal hê.

Hierdie basis is aanvanklik vir 5 jaar beplan maar is alreeds 9 jaar in gebruik niesteenstaande die 40 voet sneeu wat die geboue bedek. Dit is wat hierdie gebou merkwaardig maak omdat sover ons kennis strek dit die gebou is wat die langste diens op die drywende ysbank in Antarktika gelewer het.

In die nege jaar van die ou basis het hierdie Departement die gedrag van die geboue baie noukeurig bestudeer

sodat moontlike foute wat in die eerste ontwerp begaan is reggestel kan word.

Die beplanning van die nuwe basis is gefinaliseer met weinig drastiese veranderings. Die voetstukke is effens verander om toe te laat vir enige hitte lekkasie deur die vloer wat kan veroorsaak dat die sneeu om die voetstukke wegsmeelt.

Verder is meer aandag aan brandwerende vereistes van die panele gegee deur 'n minerale wol wat in vogdigte sakke verpak is in die panele te gebruik. By die vorige basis is gevind dat vog die panele binnedring, die isolasie materiaal met water versadig met die gevolg dat die panele geen isolasie-eienskappe besit nie.

Waar die sneeu-gang by die 1962 basis aan die Oostekant was is dit nou verskuif na die Westekant sodat enige abnormale sneeu akkumulering as gevolg van obstruksies by die ingange na die sneeugang weg van die basis kan plaasvind met die heersende Suid-Ooste winde.

Brandbeveiliging vir die nuwe basis bestaan uit die volgende:

- (a) Behandeling van muur- en dakpanele teen brand deur brandvertragende verf.
- (b) Spesiale voorsorg is getref in die kragkamer en die woon kwartiere deur die twee vertrekke, wat die grootste brandgevaar inhou, deur 'n spesiale asbestos en perliet bekleding teen die mure aan te bring.

Hierdie bekleding het 'n een uur brandweerstand-vermoë volgens die I.S.O. toets.

- (c) Die basis sal toegerus word met 'n outomatiese brandalarmstelsel wat sal bestaan uit hitte, rook en vlam opspoorders.
- (d) Die kragkamer sal toegerus wees met 'n outomatiese koolstofdioksied brandblusstelsel wat ook hand-beheer sal wees.
- (e) Behalwe vir vier geperste lug asemhalingsapparate wat vir brandbestryding bedoel is, is elke ekspedisie-lid ook toegerus met 'n baie ligte tipe geslote baan suurstofasemhalingsapparaat wat vir reddingsdoel-eindes aangewend moet word.
- (f) Die basis word verder toegerus met brandblussers wat geen onderhoud nodig het nie en wat sal bestaan uit:
 - (i) water (anti-vries)-koolstofdioksied tipe,
 - (ii) droë poeier - druk tipe
 - (iii) koolstofdioksied
 - (iv) B.C.F. tipe
 - (v) B.C.F. massa-eenheid (50 pond).
- (g) Die volle ekspedisie ontvang breedvoerige onderrig in brandvoorkoming en brandbestryding en word ook toegerus met 'n volledige handleiding.

(Dié artikel is goedgegunstelik deur die Departement van Vervoer aan die Bulletin voorsien.)

Summary of the Chairman's Report 1969/70

DR. L. E. KENT

The Committee arranged four meetings during the year.

The films:

- (1) '47° South' (on Marion Island)
- (2) 'D.E.W. Line'
- (3) 'People of the Arctic'
- (4) 'Scott of the Antarctic'

were shown and proved to be very popular. In particular 'Scott of the Antarctic' which featured John Mills as Scott was very well attended and many people have expressed the hope that it will be shown again.

Talks illustrated by colour slides included:

- (1) 'Two years at Halley Bay' by Dr. L. M. Jubes of British Antarctic Surveys,
- (2) 'Borgabasis - 'n Geologiese Oorwinteringsbasis in die Berge 400 km Suid van SANAE' by Messrs A. Aucamp and L. Wolmarans.

Both these talks were most interesting. The account of the exploration of an hitherto completely unknown part of Antarctica captured the imagination of the listeners.

The annual dinner was very successful and well attended as usual. The guest speaker on this occasion was one of our patrons, Mr. D. J. Joubert, then Secretary for Transport.

The Department of Transport is sponsoring the publication of a South African Journal of Antarctic Research which will be issued under the auspices of the Scientific Committee for Antarctic Research, and produced and distributed by the publishing division of the C.S.I.R. The proposed name for the journal is 'Antarktika' with Dr. D. G. Torr as scientific editor.

Sedert 1966 is die Bulletin saam met die tydskrif *Spectrum* van die Stigting vir Onderwys, Wetenskap en Tegnologie, uitgestuur. Die oplaag van hierdie tydskrif is om en by die 6 000, en ek het onlangs van mnr. V. C. Wood, Hoofredakteur, verneem dat hy gedurig navrae van onderwysers(esse) kry wat na die Bulletin uitsien, indien dit nie betyds beskikbaar is nie.

Ek wil graag die borge van die Bulletin asook van ons Antarktiese Medalje, BP Suidelike Afrika (Edms) Bpk. van harte vir hierdie onontbeerlike ondersteuning bedank.

Slips into the History and Prehistory of Antarctic Winter ON ELEPHANT ISLAND

CHAIRMAN'S REPORT

KEY TO A SPACE RESEARCH PUZZLE

VIS AAN DIE YSBANKFRONT

DIE VOORGESKIEDENIS VAN BOUYET-EILAND

GEOLOGICAL SAMPLING IN THE AHMANNRYGGEN AREA

HOW AWAY FOR SANAE

SEDE JAAR DINEE VAN DIE VERENIGING

BERG BITS AND GROWLER

NUUS VAN DIE EILANDE

REKER, KULERGASTIE EN HONDEGELER

Summer Expedition 1968 and SANAE IX

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EXPERIENCES AND WORK SANAE III, 1963

Graham Lar

LIFE AND ACTIVITIES AT T Eerste S.A. ANTARCTIC BASE

APRIL 1968

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"ANTARKTIESE BULLETIN" MAKES ITS DEBUT

AURORAL OCCURRENCE AT SANAE, ANTARCTICA, 1964

SURVEYING IN THE ANTARCTIC

News from SANAE and the Islands

THE HUSKY FRIEND AND FIGHTER

VISIENE IN ANTARKTIESE NAVORSING

SANAE TO SOYLA

BRAKENS OP DIE PAD

VOORSITTER SE JAARVERSLAG

Die Kaapstadse Magnetiese Ann Kosmiese Strale

CAPTAIN ALFRED RITSCHER, 1879-1963

TOBOGGANS IN ANTARCTICA

RED-ACTIONELE - EDITORIALE

oepassing van Radio-aktiewe Isotope in Antarktika

BEWEGING VAN DIE ANTARKTIESE YSKLEED

SEWENDE JAARLIKSE DINEE VAN DIE VERENIGING

Die Medalkomitee het eenparig besluit om nie vanjaar 'n medalje toe te ken nie.

Die skielike heengaan van Dr. André van der Merwe, 'n baie aktiewe lid van die Vereniging, 'n vroëre redakteur van die Bulletin en wie laasjaar met die goue medalje bekroon is, op 4 Desember was 'n groot skok. 'n Hele paar lede van die Vereniging het die roudiens in Pretoria bygewoon en medelye aan sy eggenote en familie betuig. Ek wil ook graag melding maak van die eerste noodlottige ongeluk wat ons Antarktiese Ekspedisies getref het nl. die afsterwe van Gordon Mackie van SANAE X wat op 3 Desember in die berge na sy dood geval het. Ons as Vereniging treur saam met sy maats en wil ook ons innige meegevoel met sy familie betuig.

'n Nuwe Antarktiese uitstalling wat o.a. 'n diorama van 'n Antarktiese toneel met lig- en klankeffekte asook 'n nabootsing van 'n gedeelte van die woonkwartier by SANAE sal behels, word tans beplan en sal hopelik in die loop van 1970 voltooi word. Die Departement van Vervoer het goedgegunstiglik 'n ou hondeslee en ander toerusting spesiaal van Antarktika vir die uitstalling laat terugkom. Bo en behalwe beligte groot kleurfoto's, gaan kleurskyfies d.m.v. 'n outomatiese projektor vertoon word. Hier is 'n kans vir lede wat foto's van algemene belang besit om hulle vir moontlike duplisering beskikbaar te stel.

Mr. Kingwill has put forward a very interesting suggestion concerning club membership, viz. that we confer membership of the Association on all past and present expedition members. From this year on, every returning expedition member would receive on arrival

in Cape Town, a letter (or card) from the Hon. Secretary advising that he was now a member of the Association. Such members would not be called upon to pay annual subscriptions, but it would be indicated that voluntary contributions to the Association's funds would be welcome.

Those who have not wintered over in Antarctica or on the Islands, would, as in the past, be able to join the Association, but would have to pay annual subscriptions.

At the present time although we have distinguished Patrons, we do not have any Honorary Members. The Tenth Anniversary of the founding of the Association may be a suitable occasion for electing one or more distinguished Antarctic explorers and/or scientists to Honorary Membership.

Last year saw the establishment of the four-man wintering over base in the Borga and the exploration of much virgin territory. This work and the long traverses now being planned up to the great Polar Plateau is arousing considerable public interest at present.

U komitee het deeglik op die saak van metaalwapen ingegaan, en 'n ontwerp laat maak, en 'n tender ingewin.

Ten slotte wil ek u verseker dat dit vir my 'n besondere voorreg was om as u voorsitter te kon optree. Ek wil my opregte dank betuig aan die Vise-Voorsitter Dr. Duncan Baker, die ere-sekretaris mnr. Hannes Loots, die ere-tesourier mnr. Ferdie Viljoen, en mnr. Marten du Preez, bestuurslid, vir hulle gewillige hulp, ondersteuning en diens. Baie dankie, en sukses vir die Vereniging op sy 10e jaar.

NEWS FROM SANAE AND THE ISLANDS

SANAE Newsletter for April 1970

This month came to a close with the Borga team still halted just north of Muskeg depot besieged by bad weather conditions and mechanical problems. Snow accumulation was so bad on days that the inhabitants of the 'Bread-Wagon' had to be dug out.

Earlier in the month the snow melter became blocked. During attempts to clear it a marker pole was accidentally dropped down the shaft, and landed on Willem's left hand. Consequently Peter had to put aside his crowbar and spade for a while and amputate the tip of Willem's left little finger, which is now covered by a huge bandage.

About a fortnight ago there was a brilliant display of aurora which competed with the full moon. Harm who was in the seismic hut at the time saw the magnetic disturbance registered on his instruments and in his haste to get outside and see the display slipped at the top of the shaft and fell twenty feet breaking his right patella. His leg is now in plaster and he is busy learning to use a pair

of crutches. We all hope that he will soon regain the full use of his leg.

During a severe storm, driftsnow filled the balloon shaft to a depth of twenty foot and the meteorologist had, as a result, to stop launching balloons until it was cleared.

Early one morning Willem and Peter set out in the caterpillar for substation to collect a toboggan and other supplies. However, they lost their way and had to return to the base empty handed, when overtaken by darkness. Several days later Willem and Eugene left for Draaipunt in the caterpillar taking with them essential spares for the muskies of the Borga party. It is hoped that these will help to get the party on the move again.

The Skuas have long since left us, but there are still a number of Antarctic petrels and snow petrels to be seen around the base and at the Buktas.

The high point of the month was the celebration of Prieur's birthday on the 25th. Peter was cook and Gert

skivvy for the occasion. The main course on the menu was roast, and a slightly scorched turkey. Our wine glasses were put to good use and there were a number of headaches the next day.

The hours of day-light continue to get shorter, while the temperatures show a continuous downward trend, every day bringing a new 'lowest' for the year. By the end of the month the sun will have set for the last time this autumn and it will be two months before we at SANAE see it again. Most of us are looking forward to the experience of having almost two months of continuous night.

Regards — Donald.

Marioneiland Nuusbrief, April 1970

Ons groet hier van Marion vir ons kollegas in die Republiek op Gough en SANAE. Die 27ste aflosspan is alreeds ses weke hier en begin al goed aanpas by die roetine van ons werk. Al die spanlede is sover baie optimisties oor die jaar wat vir ons voorlê.

Die weer gedurende April maand was van wisselende aard. Oppervlakwinde het talle male stormsterkte bereik. Geen probleme is egter gevind met die loslaat van ballonne nie. In die laaste week van April is ons verras met 'n seldsame verskynsel, 'n donderstorm op Marion, wat 'n goeie deel van 'n nag geduur het. Op een stadium gedurende die maand het die reënvalgrafiek getoon dat as die reënval teen so 'n tempo styg, die gemiddelde reënval van die jaar binne 'n paar weke verbygesteek gaan word.

Die hoë reënval was dan ook die rede vir die uitspoel van die water toevoerpyp by die dam ongeveer drie myl van die basis af tot erge van 'n paar van die spanlede, want dit het meegebring dat die drie myl maal heen en weer met swaar pakke op die rug gedoen moes word.

Met die dae wat korter word, temperature wat by vriespunt kuier en pikkewyne wat ons geleedere verlaat het, besef ons terdeë dat die winter vir ons voorlê.

Eintlik moes 'n mens dan die rede hier soek vir al die dinge waarmee die ouens hulle begin besig hou noudat die weer die neem van foto's beperk tot 'n minimum. Soos bv. Koos Visser met sy modelbouery, André Pretorius die grapmaker van die span met sy skilderwerk, Allan Steveni die klanktrou deskundige met sy musiek, Roy Goslin met sake wat na aan die hart lê, Leon Fourie ons radio operateur met broodbak, onversadigbare leeslus en die stil daarvan. Fanie Schonfeldt ons radiotegnikus met sy radiosenders wat net nie reg wil werk nie. Johan Coetzee ons mediese ordonnans, baaskok onder ons, met sy sang oefeninge in ZS2 MI, die verste gebou van Marionhuis af.

Ons wens die lede van die 26ste aflosspan en die span van Gough wat nou terugkeer Republiek toe alle sukses en beste vir die toekoms. Ons wil graag langs die weg vir Hein Pienaar, leier van Marion 26, en sy vrou tjie 'n baie gelukkige en geseënde huwelik toewens van Marion 27.

Gough Island Newsletter for April 1970

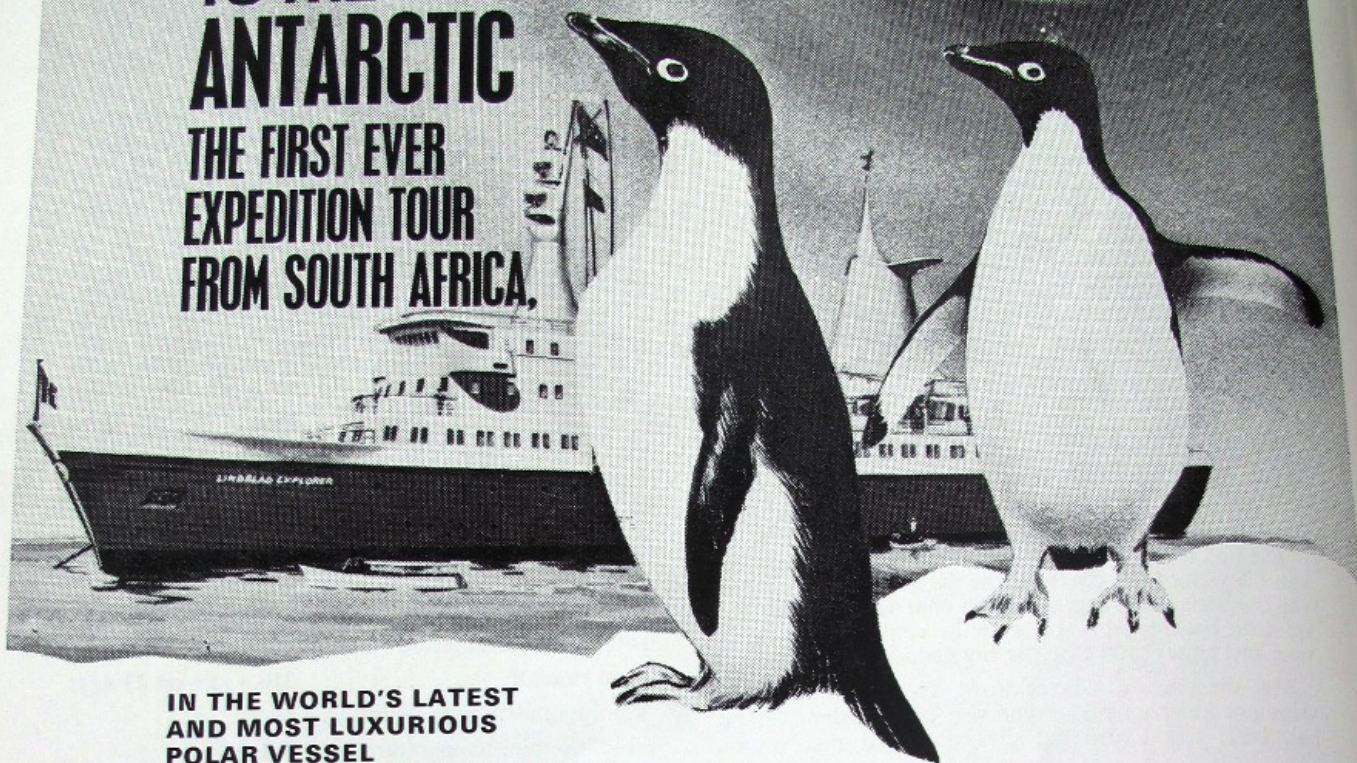
This month has been one of cloudy rainy days with at least half the normal total hours of sunshine being recorded. However, the impending arrival of the RSA with the new team and post did cast some cheer on this gloomy scene. The Island has been almost deserted by the birds which having spent the summer nesting here, have presumably left for a more pleasant climate.

Johan Combrink's birthday was celebrated on the 16th. The following is the weather data for the month:

Mean surface pressure	1 017.3 MBS.
Mean surface temperature	13.3° C.
Mean relative humidity	87 per cent.
Total sunshine duration	86.2 hours
Total rainfall	310.4 mm on 23 days
Absolute max. temperature	..	19.7
Absolute min. temperature	..	5.2

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READER OPINION POLL

PLEASE RETURN THE COMPLETED FORM TO
THE EDITOR, 32 PARK AVENUE, BORDEAUX, ~~RANDBURG~~

1) What is your status concerning the Bulletin?

a) ex-SANAE member

b) member of the Antarctic Association

c) teacher

d) scholar

e) other - please specify below

2) When your copy of the Antarctic Bulletin arrives in the mail do you -

a) read it

b) glance at pictures and headlines

c) discard it immediately

3) How many people read the copy which you receive?

4) Which type of article do you prefer?

a) articles of social interest concerning team members

b) articles concerning life at the base itself