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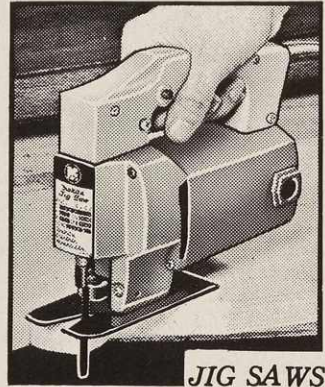
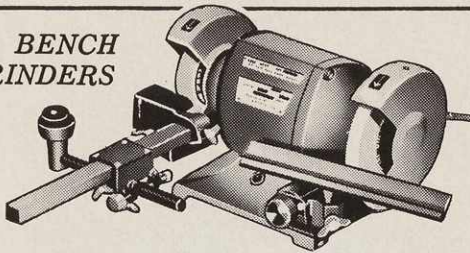
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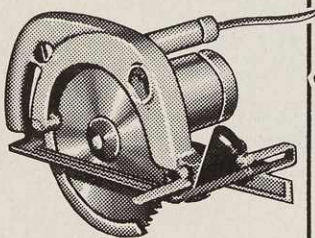
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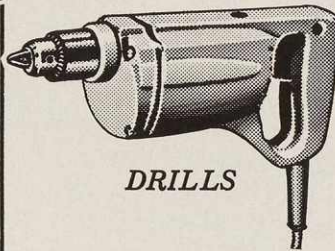
BENCH GRINDERS



JIG SAWS



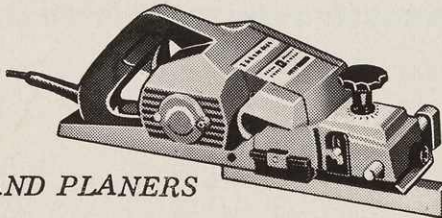
CIRCULAR SAWS



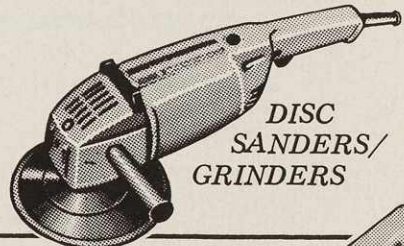
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The Quest 1970

Queenstown Secondary Technical School

M.C. (P). 2180

NO. 13

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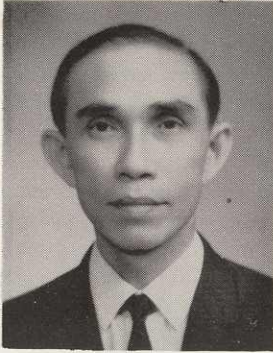
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FOREWORD



It is indeed a privilege and an honour for me to be invited to say a few words on behalf of the School Advisory Committee.

A year has elapsed since the formation of the School Advisory Committee. In this short span of time, we have launched two projects in raising money for the Students' Welfare Fund. The response to our appeal so far has been very heartening. The public has given us its generous donations and unstinted support. Many students have benefited from the Welfare Fund. There are, of course, many more whom we would like to assist financially. However, this will largely depend on how actively you perform your role in future projects. I am quite sure that you will rise to any occasion to help us to help yourselves.

Fund raising is only one of the activities of the School Advisory Committee. Our overall aim is to foster a closer relationship in many ways as possible between members of the local community and the School to make education more meaningful and a common stake.

In conclusion, let me take this opportunity of exhorting you to greater efforts and wishing you every success in your studies.

Tang Poh Wah

Png Kin Thye

Kua Cheng Peng

Wee Choong Seng

Wilson Sung

COMMITTEE MEMBERS

C.R. Krishna

Lau Hieng King

Lim Hong Thou

Chairman, School Advisory Committee.

Hon. Treasurer

Kwan Chee Yew

Hon. Secretary

Lee Chong Kee

Vice-Chairman

Seow Aik Khim



editorial



Our motto "Dare to Serve" should not only be fulfilled at school level, but whenever necessary at national level. In this respect there is a need for us to cultivate the sense of the three 'd's. — namely dedication, diligence and discipline. There should not be fear in composing our thoughts, in expressing our ability or in utilising our potentiality. Dare to serve is to excel in all fields. Only then can we be reliable youths burning with ideals and aspirations, and participating in youthful endeavours, bringing about deep changes in this world.

Finally, on behalf of all Queenstownians may we congratulate our principal and members of the staff for this successful year.

The sixties were constantly besieged by turbulent years since the first days and no one will deny that what dominated the decade was but a period of tremendous transformation. Today, the seventies begin, creating in us a feeling of uncertainty and insecurity. Whatever the challenge of the future may be, the anticipation of more taxing and persistent problems ahead should never be dismissed. In the previous decade, we in Singapore experienced an era of economic, political and social changes, at times marred by crisis. Yet we were able to achieve much. This shows that we have managed to adapt ourselves to our rapidly developing and changing society.

With parallel progress in our school, we have made this eventful year more gratifying and memorable. Once again in this publication of the 'Quest', we reflect the commendable attainments and patterns of thought of our pupils, both in the academic realm and on the sports front. Last year two of our H.S.C. students were awarded Columbo Plan Scholarships and several others are now in various institutions of higher learning. In sports we were district champions in soccer and softball, and district runners-up in hockey. At the district swimming carnival, we snatched the A and B divisions and the overall championship titles. Though these achievements seem to be of minor importance, they are the spring board to greater heights of achievements. Being aware of the demands of technological and industrial changes, we have not neglected our duty of producing future technocrats. This year there are three electrical and two electronic classes, and our two electronic workshops are superbly equipped.



editorial

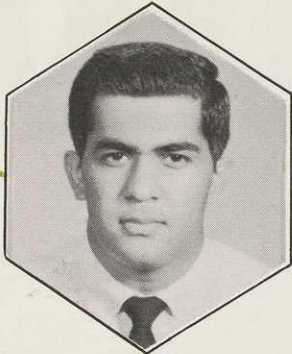


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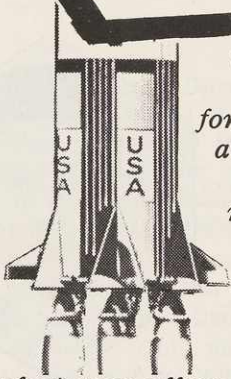
history in the making

THE speeding Apollo 11 crew adjusted their course last night so that they will now go into moon orbit three minutes earlier on Saturday.

Astronauts Neil Armstrong, Edwin Aldrin and Michael Collins fired their spacecraft engine for three seconds to adjust their course, putting Apollo 11 on a trajectory that should bring it to within 70 nautical miles of the moon without any further corrections.

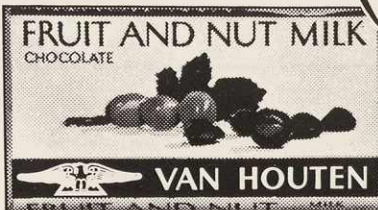
They breakfasted on fruit - cocktail, sausage meat pattis, cinnamon toasted bread cubes, cocoa and grapefruit drink.

Malay Mail Friday 18th July



A few years ago, when the US Gemini astronauts made their first expedition to outer space, they carried with them a food which has been a favourite with explorers for centuries: CHOCOLATE. In July 1969, the three US Apollo 11 astronauts, on their historic moonlanding mission, had COCOA during breakfast. Chocolate and Cocoa have all along been recognised by scientists not just for their palatable qualities, but more for their nutritious value as food to conserve energy.

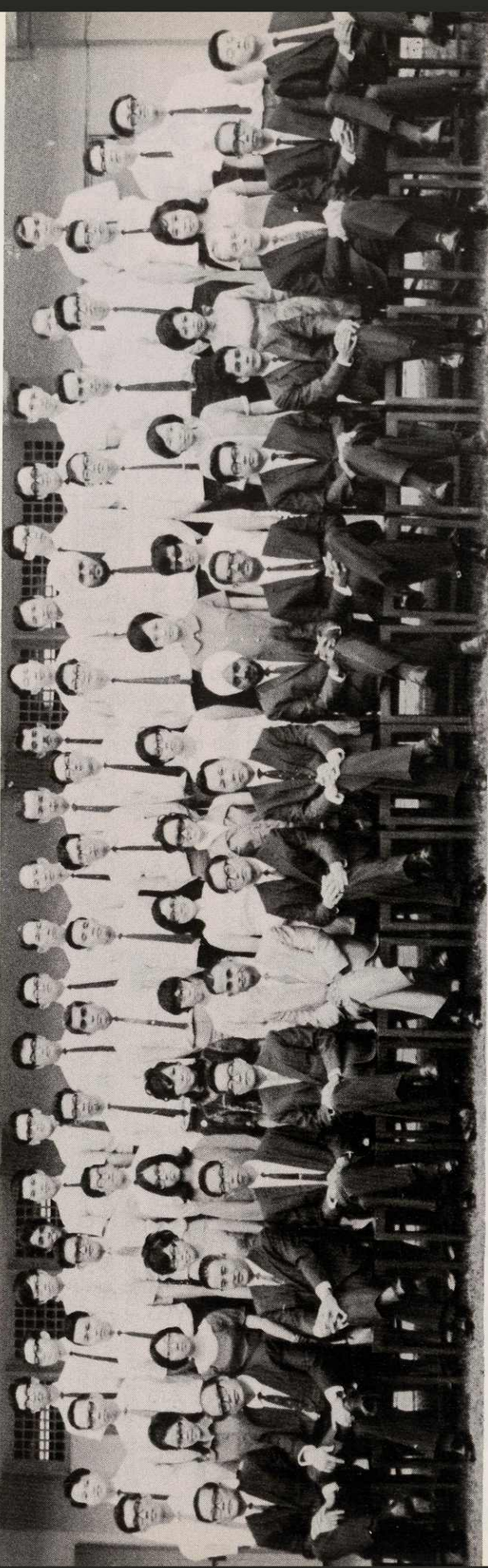
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Messrs. Teo Yeow Seng, Ronnie Chan, Seet Chim Teck (Sports Secretary), Lee Lok Onn, Tam Wing Hong, L. T. Kewal, Lim Yew Tong (Senior Assistant, a.m.), Lee Chong Kee (Principal), Ajit Singh Gill (Senior Assistant, p.m.), K. Param (Prefect Master), Chew Sang Song, Kenneth Pereira, P. K. Hennon, Chang Kok Hong, Toh Kim Kang.

Standing - 1st Row, (Left to Right):

Mr. See Poon Kiong, Misses Chan Lin Peng, Po Ah Moey, Chng Soh Mian, Chan Lin Soon, Kuah Lee Keow, Wang Choon Keng, Rosa Tham, Tan Yong Kheng, Mrs. Thia Mui Cheng, Mrs. Lee Yung Soon, Misses Wong Soke Yin, Sylvia Tan, Abishenganaden Shanta, Mrs. Tay Tze Ching, Mr. Yam Wai Hong.

Standing - 2nd Row, (Left to Right):

Messrs. Leong See Hoy, Cheng Chiu Chang, Wong Soon San, Ang Ah Lay, Wong You Mung, Lee Juan Kow, Suri Prem Kumar, Lui Seng Kiew, Oh Aye Lip, Yoong Choon Yee, Lim Hong Tuang, Dedar Singh, Chan Kok Heng, Lee Fok Leong, Tan Hock San, Teo Seng Kee, Wong Chong Heng.

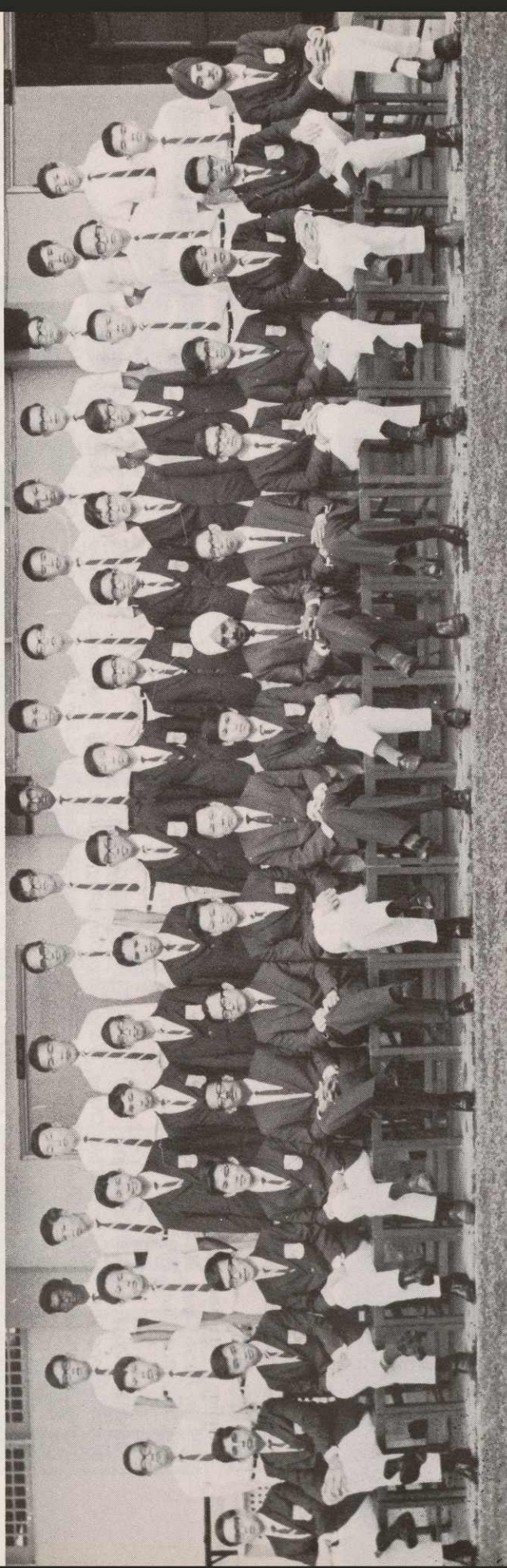
Standing - 3rd Row, (Left to Right):

Messrs. Charlie Chia Chiang Soo, Chan Kok Weng, Ng Kok Vei, John s/o John, Lim Soy Soy, Philip Tan Keng Lum, Alfred Loh, Teo Meng Tuck, Loh See Hong, Ho Kwok Choy, Ho Kum Seang, Salleh bin Salim, Kong Choot Sian, Tan Jeng Pok, Philip Chua, Chua Ban Road, Lee Han Peng, Philip Leong, Lee Tik Soo.

In Absentia:

Messrs. Dawson Victor, Lim Koon Yong, Wong Liang Yang.

PREFECTS 1970



Sitting (Left to Right):

Wong Kum Meng, Herminster Paul, Goh Lye Huat, Foo Shiang Tong, Lim Ting Fai, Mr. K. Param (Prefect Master, a.m.), Mr. Lim Yew Tong (Senior Assistant, a.m.), Chee Hoong Onn (Head Prefect), Mr. Lee Chong Kee (Principal), Oon Tik Lee (Deputy Head Prefect), Mr. Ajit Singh Gill (Senior Assistant, p.m.), Mr. Lee Lok Onn (Prefect Master, p.m.), Han Jok Kwang, Leong Kok Hoong, Chan Soon Yee, Ang Lip Chor, Amarjit Singh.

Standing 1st Row (Left to Right):

Teng Chee Tiak, Chua Hock Guan, Eng Yong Huat, Lim Syn Soo, Derek Chan, Soh Peck Lin, Hui Yue Leong, Foo Der Ho, Chor Yew Kin, Lee Chew Weng, Tan Buck Soon, Chiang Kah Kheng, Chua Liang Keng, Phua Chong Ann, Chow Chuen Wei, Foo Toon Chuan.

Standing 2nd Row (Left to Right):

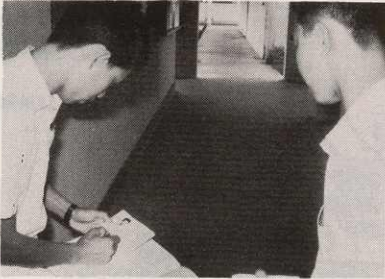
Yan Kin Wah, S. Selvaraj, Chew Teck Siong, Teo Soo Poh, Sng Hock San, Tan Chiat Phang, Lim Thiam Beng, Mohd. Amanullah, Phua Kwang Yah, Chong Yeap Cheong, Leong Chun Cheong, Kwan See Keong, Lim Hoo Eng, Toh Hock Lee, Chia Khim Meng, Tan Kok Khoon.

In Absentia:

Koh Thian Seng, Mok Siew Meng, Ong Yeok Siew, Ho Cheok Keng, Poh Choo Huat, Boey Shu Wai, Lim Joong Yong.



PREFECTORIAL BOARD



Prefect Masters : Mr. K. Param (A.M.)
Mr. Lee Lok Onn (P.M.)

Executive Committee

Chairman : Chee Hoong Onn Pre-U. 2
Deputy Chairman : Oon Tik Lee Pre-U. 2
Secretary : Han Jok Kwang
Treasurer : Foo Shiang Tong Pre-U. 2

Committee Members

Cleanliness : Lim Ting Fai
Canteen : Chow Chuen Wei
Detention Class : Chiang Kah Kheng
Lost & Found : Leong Kok Hoong
Punctuality : Amarjit Singh
Uniform : Chan Soon Yee

No. of Senior prefects : 32
No. of Junior prefects : 4

The board, with only 4 senior prefects at the beginning, is strengthened to a force of 36 after the election.

The committee is divided into 6 groups, each doing different duties. Members also execute extra work besides the general duty entrusted to each member.

We participated in the month long "Q" up campaign. The board also help to maintain order in the school swimming carnival.

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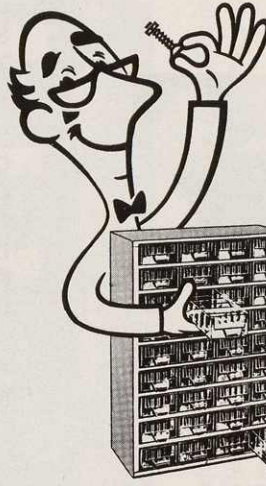
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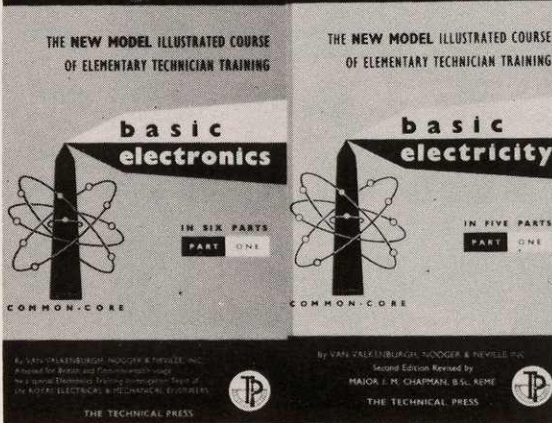
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SCHOOL SONG

DARE TO SERVE

C MAJOR



1. When Sing - a - pore its fr - ee - d - om won Then
2. In Queens-town Tech. our mi - nds ar - e trained Our
3. Queens-town Tech.'s the pi - on - e - er The

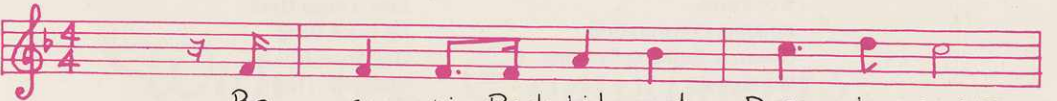


came the pro - b - lems too. To find the men to
hands ac - qu - ire the skill. What e'er the task we're
school that le - ads the way. In eve - ry field we

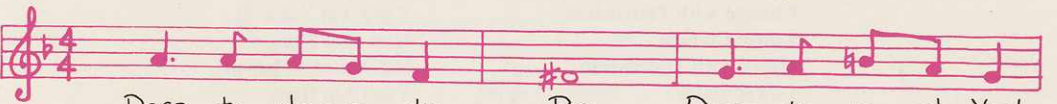


make it work Th - e boys who dared to do.
here to serve W - e have the heart the will.
do our best To - o learn to work to play.

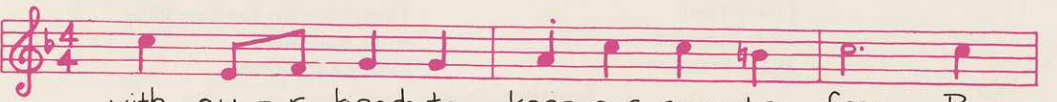
CHORUS: (MODULATED TO F MAJOR)



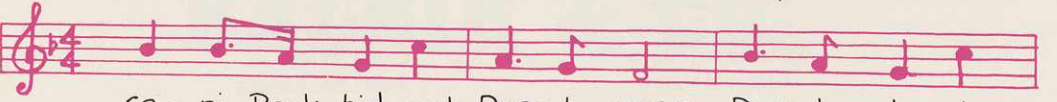
Be - ra - ni Berk-hid - mat Dare to serve



Dare to do - o to Be. Dare to wo - rk Yes!



with ou - r hands to keep our coun - try free. Be -



ra - ni Berk-hid - mat Dare to serve Dare to do to



Be We dare to work Yes! with our hands to



keep ou - r coun - try free.

PRIZE LIST - 1969

Pre-U II

General Paper	Lim Soon Leng
Physics	Lim Soon Leng
	Peck Hoe Yue
Pure Mathematics	Lim Soon Leng
	Ang Lip Tiong
Applied Mathematics	Lim Soon Leng
Chemistry	Poh Soon Hoong
1st in Standard	Lim Soon Leng
2nd in Standard	Ang Lip Tiong

Pre-U I

General Paper	Terence John, Pflug
Pure Mathematics	Yeo Boon Tong
Applied Mathematics	Eng Poh Tian
Physics	Eng Poh Tian
	Chee Hoong Onn
Metalwork	Tang Peng Seng
Geom. & Mech. Drawing	Eng Poh Tian
1st in Standard	Terence John, Pflug
2nd in Standard	Tan Yang Thia

Secondary Four

English Language	Fong Chee Mun
English Literature	Ma Wei Cheng
Additional Maths.	Chiang Kah Kheng
Elementary Maths.	Chow Chuen Wei
Physics	Lam Weng Kok
Chemistry	Khoo Hee Kwee
Engineering Science	Ma Wei Cheng
Woodwork	Low Thiam Hock
Building Construction	Ng Bock Beng
Geom. & Building Drawing	Ong Soon Hong
Metalwork	Chee Aik Tho
Geom. & Mech. Drawing	Chiang Kah Kheng
Chinese with Translation	Hong Yat Yuen
Lower Chinese	Mun Kah Shing
Malay with Translation	Md. Yusof B. Ismail
Lower Malay	Yeo Chin Heng
Tamil Literature	Balakrishnan Selvaraj
Lower Tamil	Thanabalan s/o Sundram Pillai
1st in Standard	Wong Kum Meng
2nd in Standard	Chiang Kah Kheng

Secondary Three

English Language	Chen Toon Foo
English Literature	Leong Peng Choy
Elementary Maths.	Chin Fah Ng
Additional Maths.	Siew Chee Kheong
Woodwork	Nah Song Chye
Metalwork	Lui Ai Suan
Geom. & Mech. Drawing	Kwok Wai San
Geom. & Build. Drawing	Lee Hong Sin
Engineering Science	Loke Kong Lang
Physical Science	Lee Chen Chuen

Chemistry
Physics
Basic Electricity
Malay
Chinese
Tamil
1st in Standard
2nd in Standard

Lim Joon Siang
Lim Joon Siang
Poon Tak Heng
Komari
Tan Chiat Phang
P. Raveendran
Foo Der Ho
Siew Chee Kheong

Secondary Three – Chinese Stream

English Language
Elementary Maths.
Physics
Chemistry
Chinese Language
Metalwork
Technical Drawing
1st in Standard
2nd in Standard

Lim Joo Thiam
Lim Yock Chong
Wong Chee Meng
Ng Choon Heng
Loh Choon Meng
Phung Tiong Ann
Phung Tiong Ann
Ng Choon Heng
Lim Yock Chong

Secondary Two

English Language
English Literature
Elementary Maths.
General Science
Woodwork
Metalwork
Technical Drawing
Chinese
Malay
Tamil
1st in Standard
2nd in Standard

Ho Pui Kee
Aw York Lin
Ho Soon Chuan
Say Kwee Teck
Sng Hee Meng
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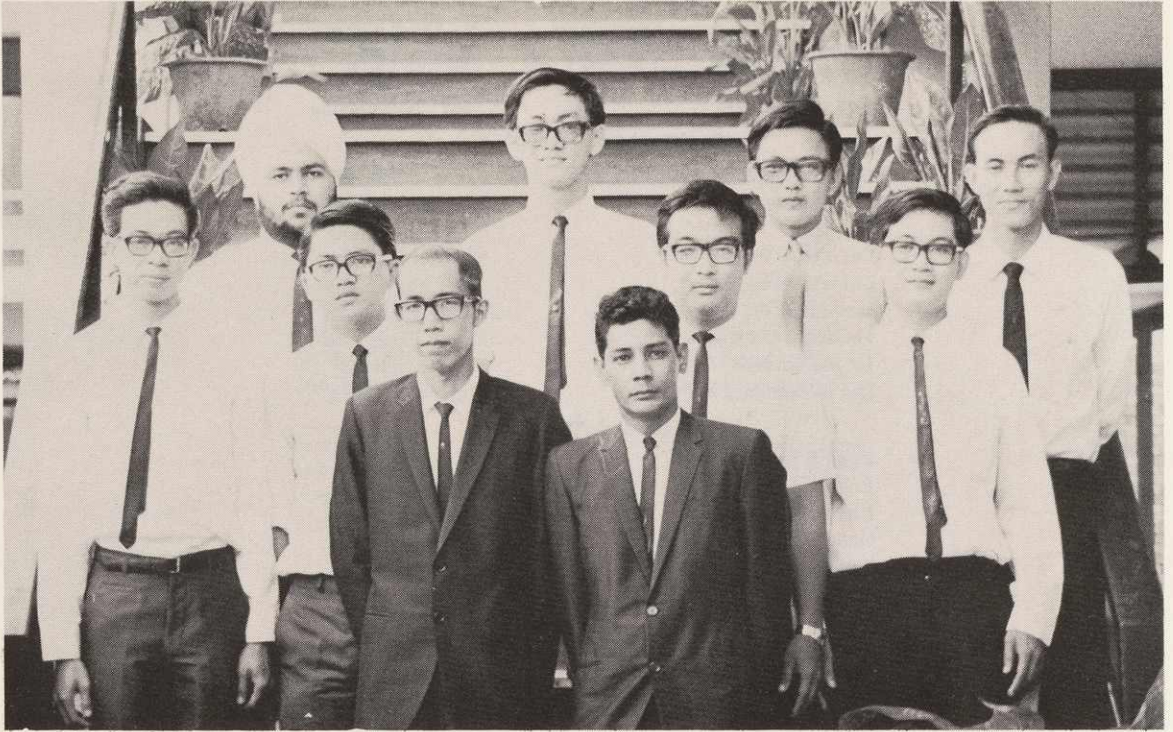
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SINGAPORE, 6.

TEL: 22938.

INTER-TECHNICAL SCHOOL SKILLS COMPETITION 1970



First row: Messers. Lee Juan Kow, Teo Meng Tuck, Chang Kok Hong, Kenneth Pereira, Alfred Loh, Lim Hong Tuang.
Second row: Dèdar Singh, Yam Wai Hong, Ang Ah Lay, Lee Fok Leong.

Of the many achievements accomplished by the Technical Department of the School, mention must be made of the successful organisation of the Inter-Technical School Skills Competition. In the competition held last year, the response was overwhelming and a growing need to conduct a similar competition was inevitable. On this striving note, a new set of members was subsequently formed to look into the comprehensive details of organising another Skills Competition geared towards a wider perspective.

The aim of the competition is to focus on the students' acquisition and elevation of a qualitative skill standard and high level of draughtsmanship in the areas of Metal work, Woodwork and Technical Drawing.

A total of 130 participants representing the various Technical and Bilateral Schools in the State entered for the Competition which was run on three major categories on the 4th July 1970.

Through the painstaking and unstinted efforts portrayed by the active members of the Organising Committee and the influential contacts of our Principal with some business houses, the Technical Department received a sum of \$2,000/- worth of prizes donated in kind towards the competition.

It is through the keen interest and growing enthusiasm of the sponsors that this competition was made possible and without whose support and help we would not have achieved another success.

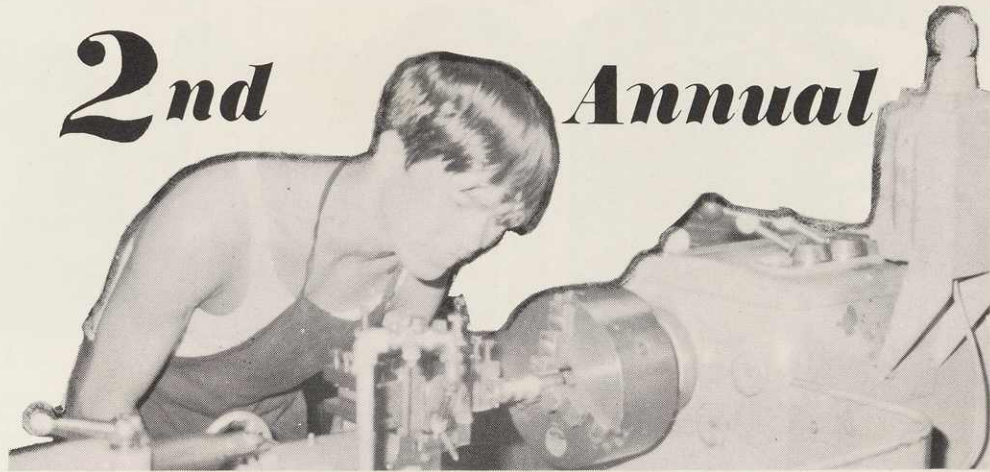
The under-mentioned sponsors have to a large extent contributed greatly towards the running of the competition.

1. National Iron and Steel Mills Ltd.
2. Diethelm and Co. Ltd.
3. Lindeteves-Jacoberg Ltd.

On this final note, may I express my sincere gratitude to the sponsors, Mr. Ng Khee Tow (Technical Representative) of Diethelm and Co. Ltd., in rendering his services, the Panel of Judges, members of the Organising Committee and all those who have help in one way or another to highlight the Competition.

Kenneth Pereira
Senior Technical Teacher.

2nd Annual

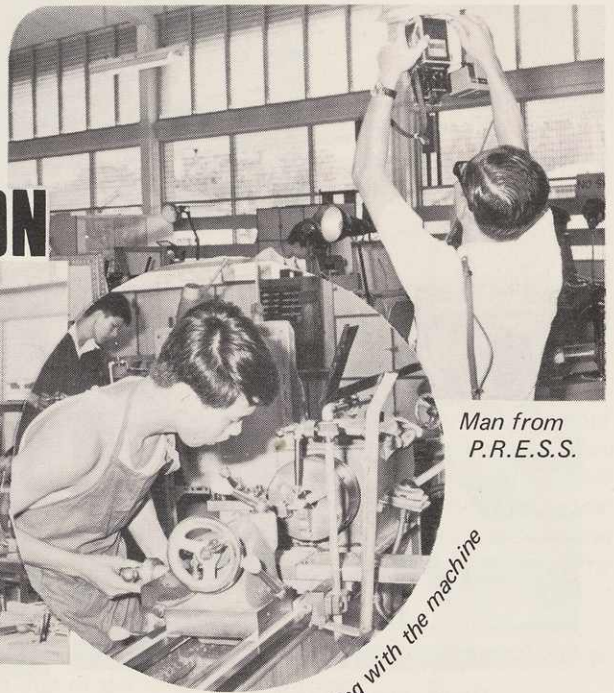


THE
"Techno-crat"
at work.

INTER-TECHNICAL SCHOOL SKILLS COMPETITION



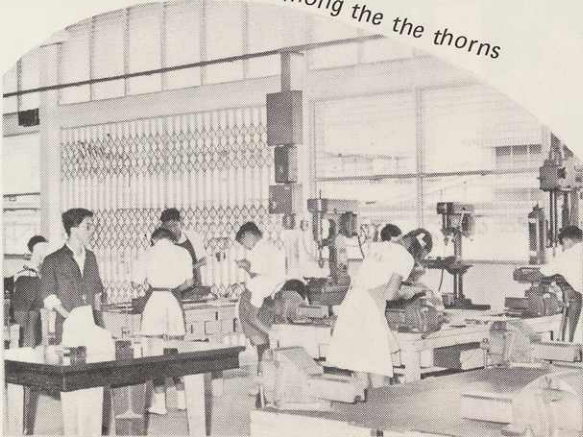
Competition in progress



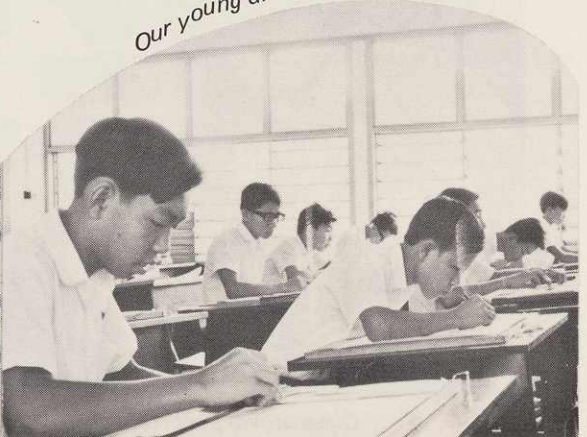
Man from
P.R.E.S.S.

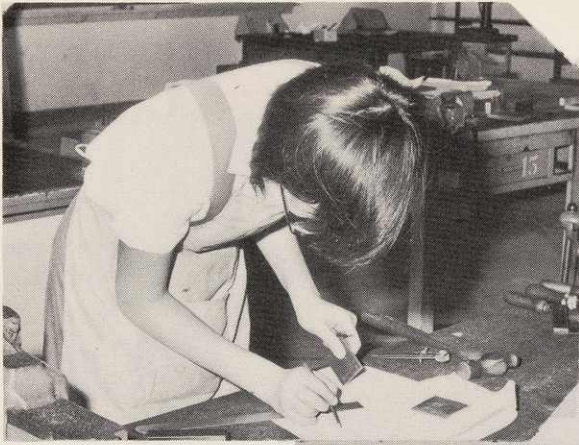
Fiddling with the machine

'Rugged' rose among the the thorns



Our young draughtsman.



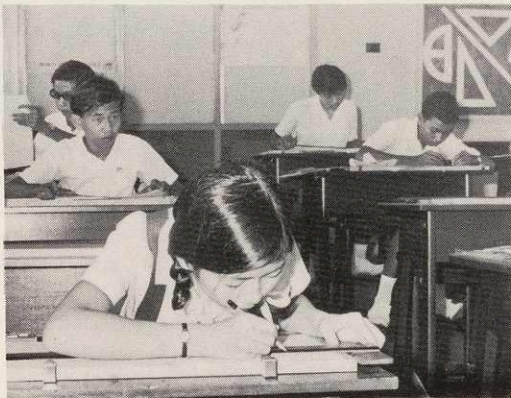


*Confidence –
the new "Breed"*



*A Battle
against Time.*

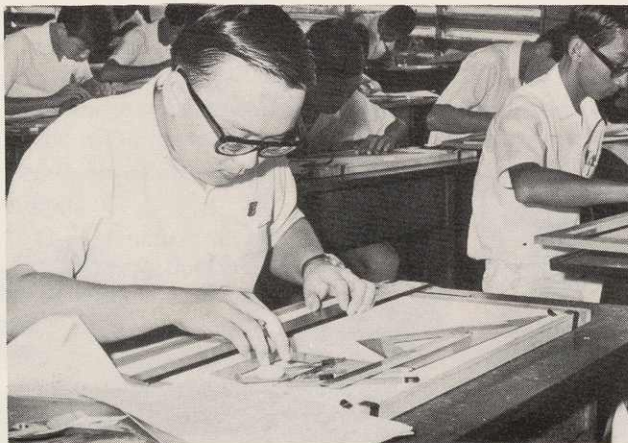
*Cheese
not Mmmm ...*



Draughtwomen at work.



Reporter from Straits Times.



Queenstown's representative.



*1st prize for Lower
Secondary – Metalwork. "Bravo!"*

SPEECH DELIVERED BY MR. TAN I TONG, DEPUTY MANAGING DIRECTOR OF NATIONAL IRON & STEEL MILLS LTD., AT QUEENSTOWN SECONDARY TECHNICAL SCHOOL ON 24TH JULY 1970.

Mr. Chairman, Mr. Principal, Ladies and Gentlemen,

I feel it an honour to be invited by your Principal, to be here to address you again.

I understand that the progress and the results of this year's competition are better than last year's. This shows that with one year of learning and experience, you have gained more skill and made much progress. This also shows that experience and skill go together.

Therefore, I hope that you will learn hard and work hard, so that more and better results will be realised in the coming year. All this is due to your hard work on the one hand, and to the hard work of your Principal and your Teachers on the other.

Maybe some of you may have wondered if by studying hard, learning hard and working hard, whether you can get a job or a good job on leaving school. As an industrialist, I can give you the answer — Yes! Earlier, your Chairman has informed you that many large international organisations are setting up their factories in Singapore, investing very substantial amounts of money and at the same time, providing employment opportunities. I am pleased to learn that recently the Government has set up more technical and vocational schools to train more technical and vocational students to cope with the future demand of the industrialisation of Singapore.

As a matter of fact, it is easier today for the blue collar worker to get a job than a white collar worker. The pay of the blue collar worker is also higher than that of the white collar worker.

At the moment, there is a shortage of skilled workers. That is why the Government recently relaxed its immigration control and allowed foreign skilled workers to work in Singapore, in order that new industries can operate, and old ones can expand.

In conclusion, I hope you will work even harder and be assured that you will have a bright future.

Thank you.



13th annual SPEECH and PRIZE GIVING DAY



Our honoured guests.



The will of iron

The epitome of knowledge



Now, as I was saying.



On behalf of the Dorisamy gold medal winner.



I sure feel proud.



A big thank you.



U.F.O.s

Looks likes eh



Man from Diethelm.



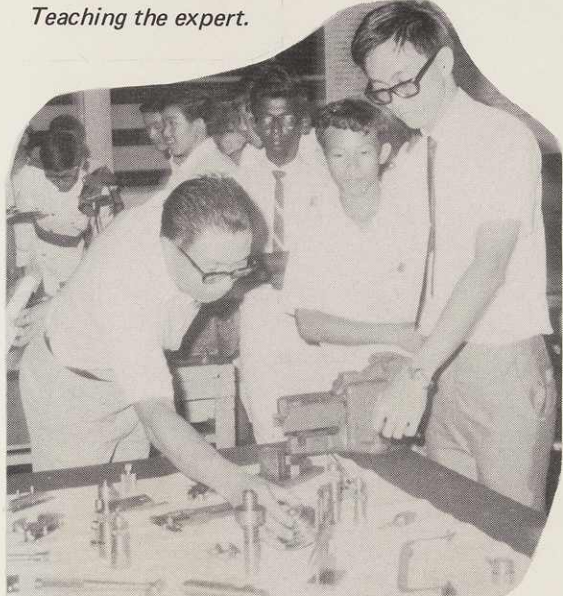
A watchful eye.



Teaching the expert.



You know, this is what we normally produce.

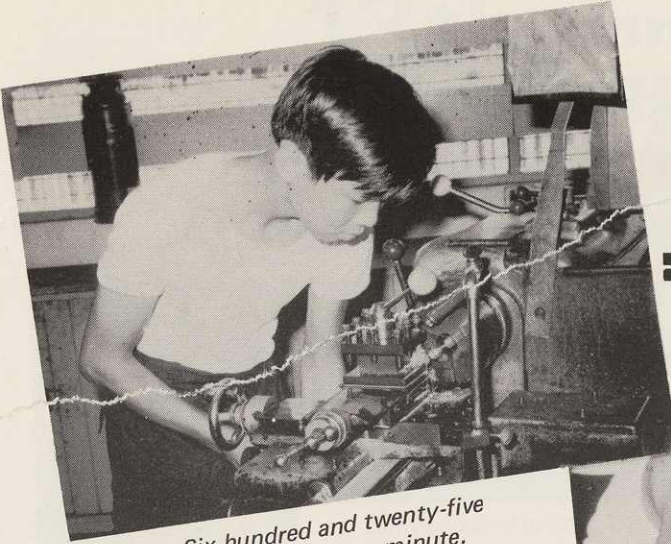


HAH! That's what I need.

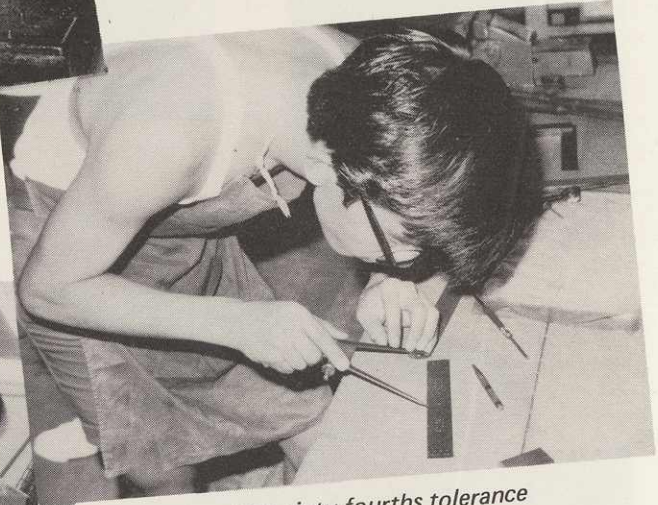


Products of Q.S.T.S.

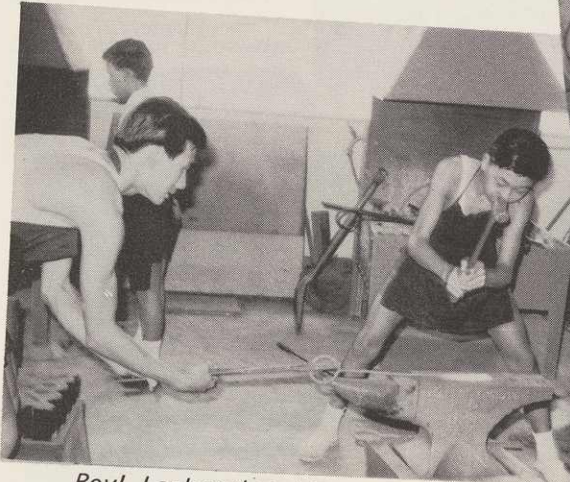
Metal Work



Six hundred and twenty-five revolutions per minute.



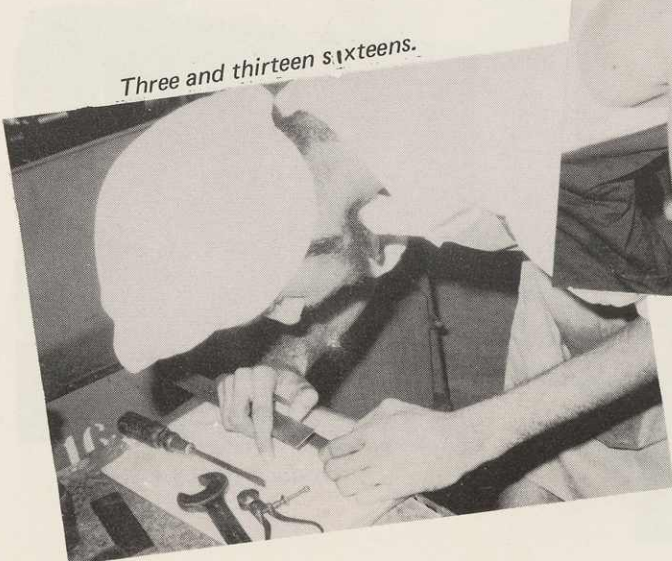
One sixty-fourths tolerance



Boy! Look at those biceps, triceps ...



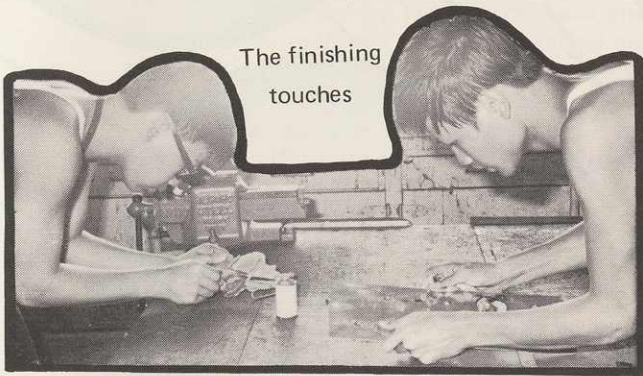
"Bastards" are not meant for square holes.



Three and thirteen sixteens.



handicraft & design competition



The finishing touches

The Singapore Tourist Promotion Board organised a handicraft and design competition opened to the residents of Singapore.

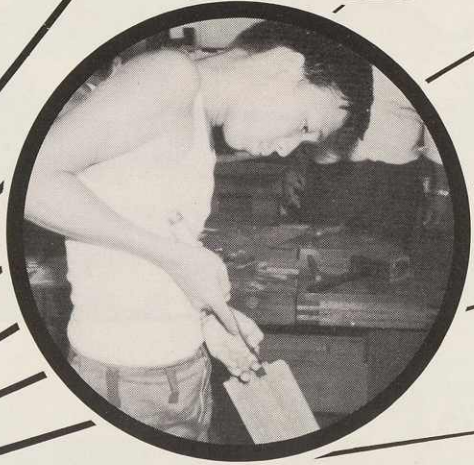
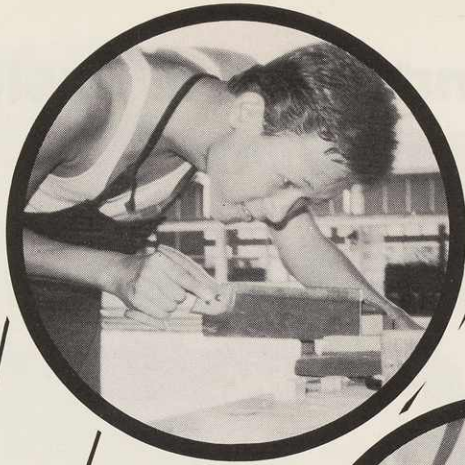
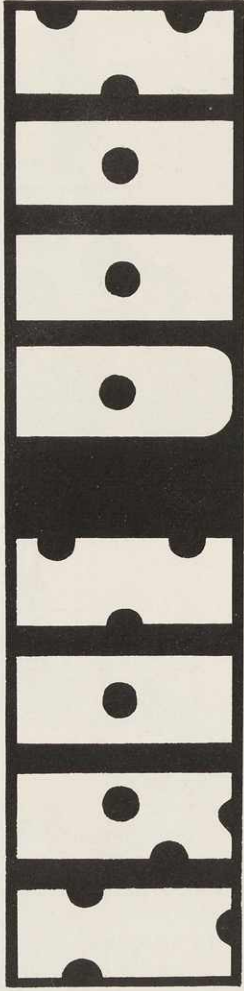
Response from the school was good. A total of 18 students from both the wood and metal classes participated. All the entries were accepted and exhibited at the Conference Hall, Shenton Way.



Brasso and Sand Paper.

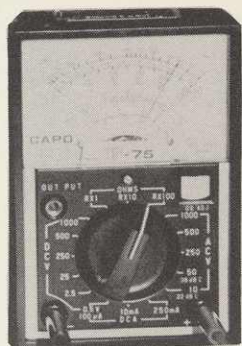


Our School Participants.



Ahh... that's a perfect joint.



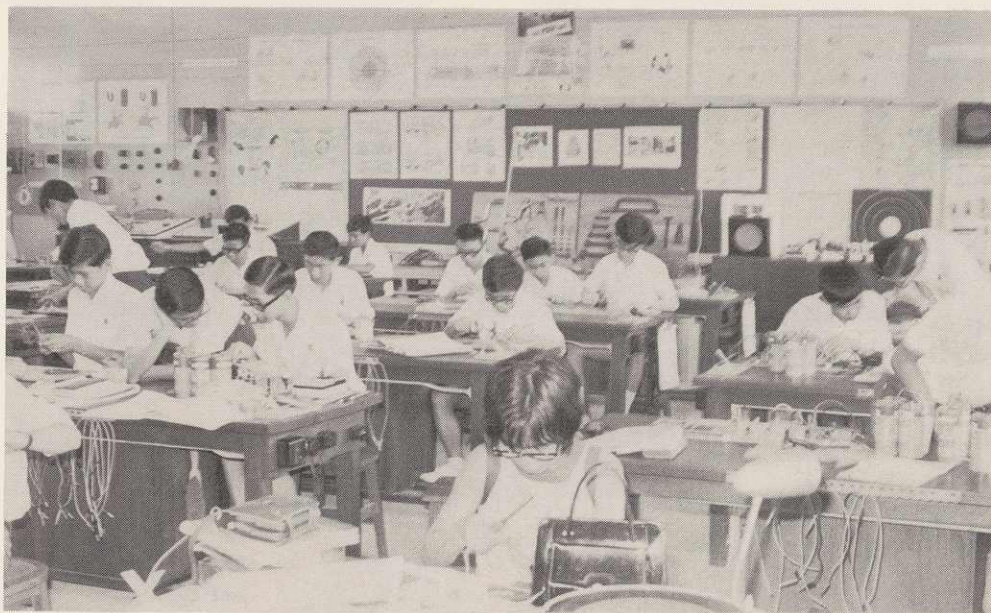


ELECTRICAL & ELECTRONICS DEPARTMENT.

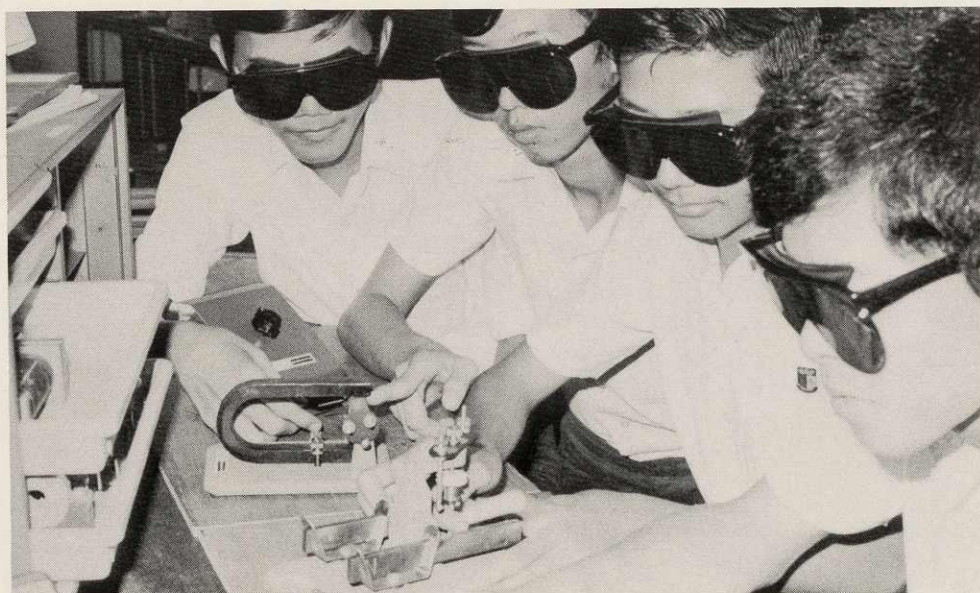
The department first opened its doors in the third term of last year. It has two workshops of which one is used as a laboratory and the other as a workshop proper. In the laboratory we have the finest equipment for teaching purposes and demonstrations, while in the workshop our boys carry out practices. Generally, our workshops are among the most well equipped in Singapore technical schools. Our boys are first given the basic knowledge and training in electricity and electronics after which they have practical lessons and finally, all that they have learnt, will be integrated to build projects like amplifiers, etc.

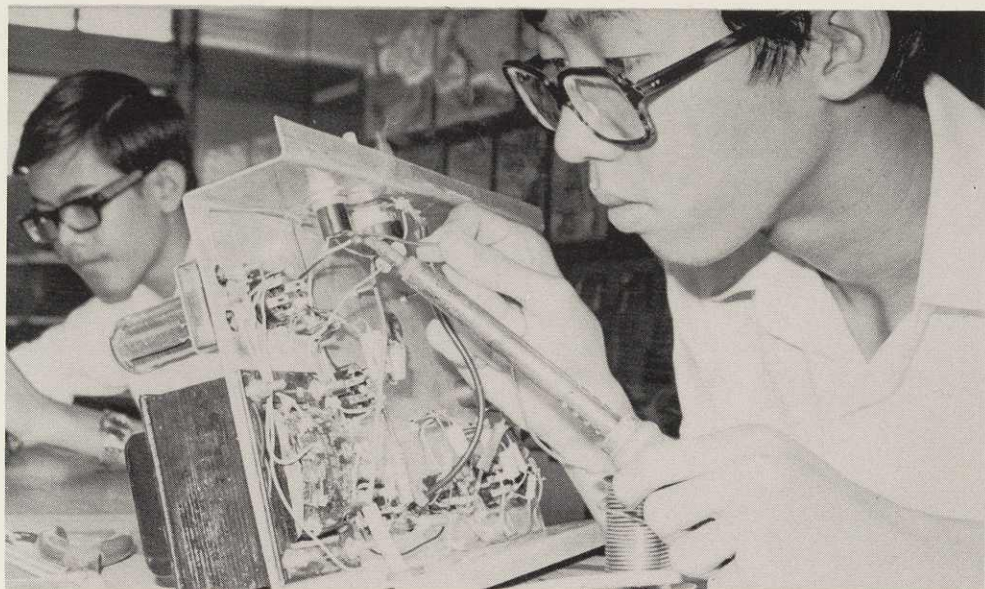
This year there are two electrical and three electronics classes. At present our pupils are preparing for their electrical and electronics examinations conducted by the Ministry of Education.

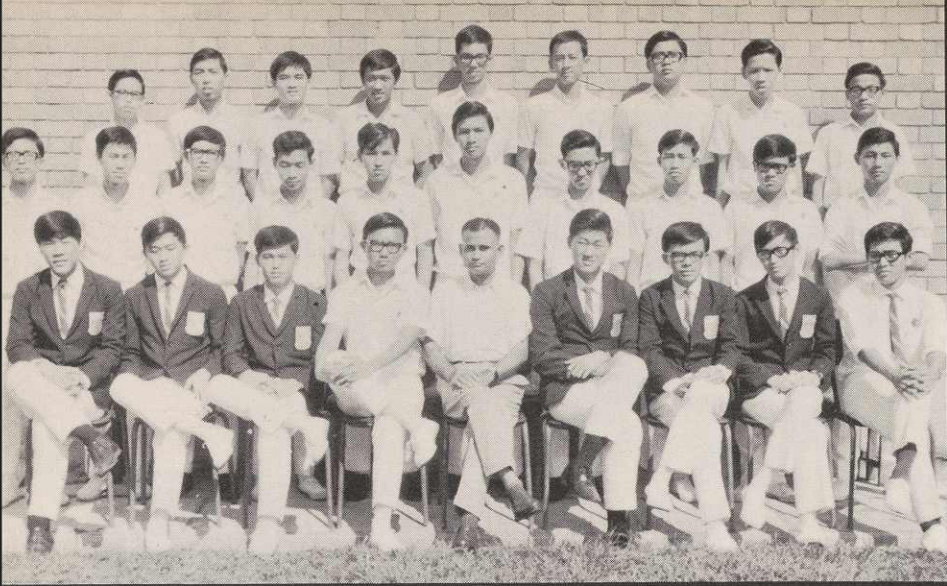
Though we have a lack of instructors and attendants, our workshops are functioning efficiently under the expert guidance of the Electronics teacher, Mr. Ronnie Chan and the Electrical teacher, Mr. Philip Chua.



ELECTRONIC secret agents at work







*Pre. U II
Form Teacher:
Mr. L.T. Kewal.*

*SEC. 4E1
Form Teacher:
Mrs. Lee Yung
Soon.*

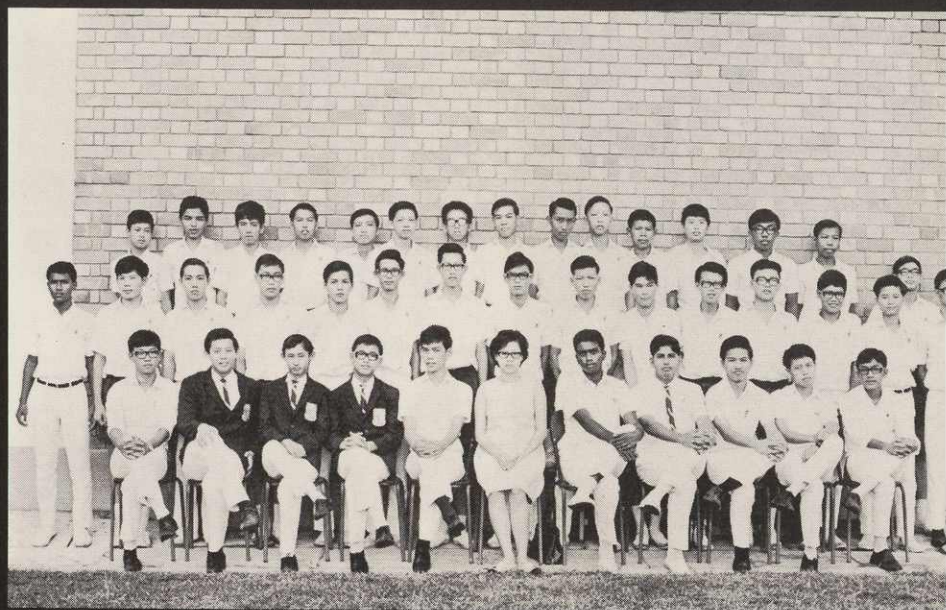


*SEC. 4E2
Form Teacher:
Miss Abisheganaden
Shanta.*





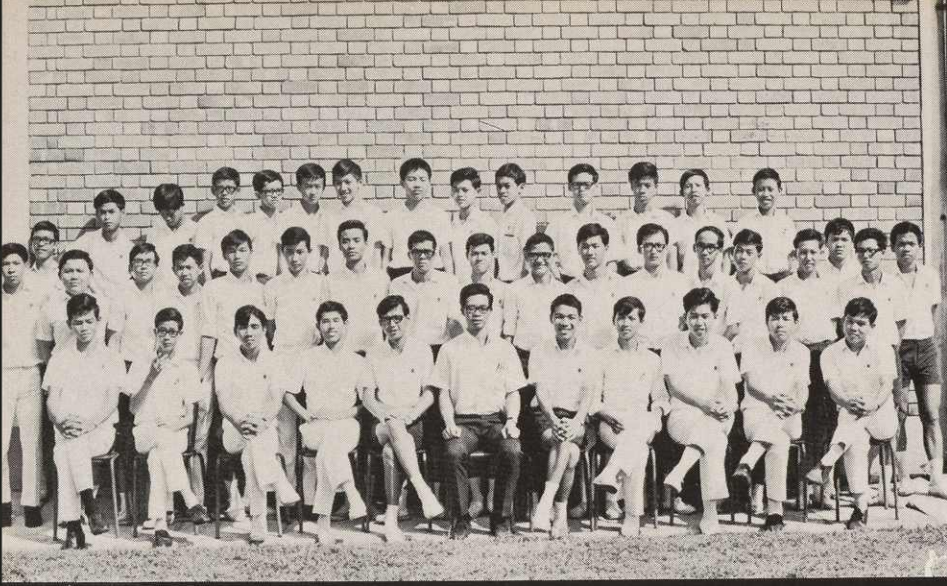
SEC. 4E3
Form Teacher:
Mr. Philip Chua.



SEC. 4M1
Form Teacher:
Mrs. Thia Mui
Cheng.



SEC. 4M2
Form Teacher:
Mr. P.K. Heron.



SEC. 4M3
Form Teacher:
Mr. Lee Juan Kow.

SEC. 4M4
Form Teacher:
Miss Sylvia Tan.



SEC. 4M5
Form Teacher:
Mr. Ang Ah Lay.



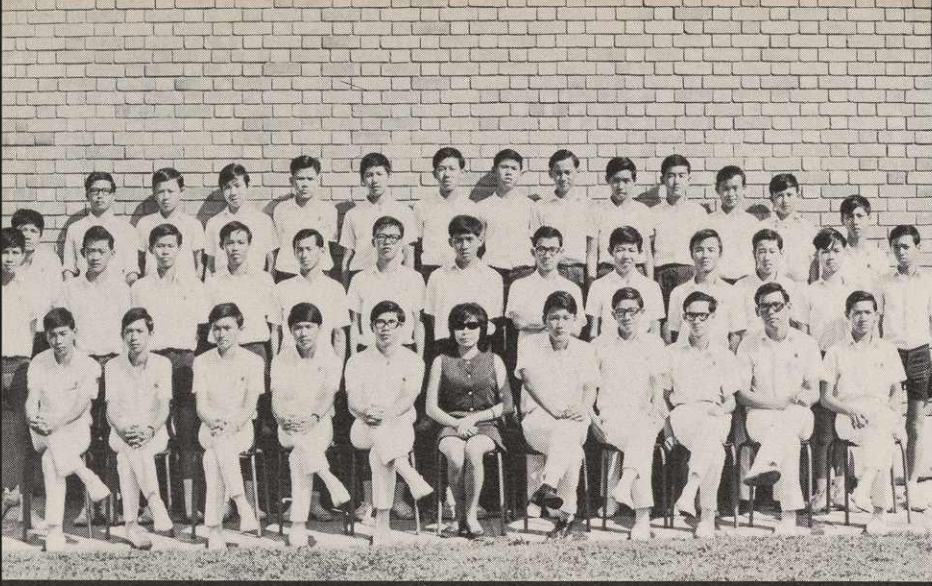
SEC. 4M6
Form Teacher:
Mr. Wong Liang Yong.



SEC. 4W1
Form Teacher:
Miss Chan Lin Peng.



SEC. 4W2
Form Teacher:
Mr. P.K. Suri.



*SEC. 4W3
Form Teacher:
Mrs. Tay Tzy Ching.*



*SEC. 4A
Form Teacher:
Mr. Dedar Singh.*



*SEC. 4B
Form Teacher:
Miss Chng Soh Mian.*



SEC. 4C.
Form Teacher:
Mr. Lim Hong Tuang.



SEC. 4D.
Form Teacher:
Mr. Yam Wai Hong.



SEC. 4E.
Form Teacher:
Miss Kuah Lee Keow.

MAN IN THE SEA,



There are about 3 billion people in the world today. In 1978 there will be 4 billion and 6 billion in 2000. Already two out of three are hungry when they awake in the morning and will be hungry when they go to bed; they will be hungry tomorrow and all the tomorrows until the day they die.

While the sea potentially contains all the proteins which they lack, 10,000 men die everyday from under-nourishment; half a billion men drag themselves around weakened and enervated by inadequate diet. . . .and yet enormous sources of food fill the oceans.

Last year fishermen hauled 45 million tons of fish, crustaceans, molluscs and edible mammals from all the seas of the world; that is, twice as much as they did 10 years ago. But it still represents only 1½% of the overall food consumed by man and it is estimated that the sea could produce well over 100 billion tons of potential human food a year.

The food and minerals are all there, the only problem is to get them. We know that a large platform surrounds the continents completely, like an easy first step on the way down — it is the continental shelf which gradually slopes to the depths of 700 to 1,000 feet. There, the bottom drops abruptly almost vertically, to deep ocean plains. All signs point to this 30,000,000 square miles of submerged lands (as large as the surface of Asia) which surround our 54,450,000 square miles of emerged land as a primary object for colonisation.

The main barrier to colonisation of the depths is that man is not built to function underwater. There are many physiological problems which have to be overcome. The first is breathing and the problems arising from breathing at high pressures. In order to exploit the bottom of the sea intelligently we will have to settle down and stay permanently on the bottom in a comfortable hut from which we shall be able to watch our farms and goods day and night. The ordinary aqualung or helmet diver cannot fulfill these requirements, thus we need more advanced and efficient breathing requirements. In the near future we will either use gills or advanced forms of Scuba (Self contained Underwater Breathing Apparatus).

The first 'gill' was invented by Waldemar A. Ayres of New York in August 1962. This 'gill' in its simplest form has one important limitation. A diver using it could stay underwater indefinitely, but not go very deep. This is because the gill pressure is less than that of the water, and the diver's lungs are not strong enough to work against the water pressure. The aqualung avoids this by supplying air at the same pressure as the water. The second inventor to secure a patent for an artificial gill system, Lewis Strauss, a Washington D.C. physician, has a way of coping with depth limitation. The Strauss gill uses the Freon 318, which is odorless and non-toxic. It has the property of remaining 'in solution' in membrane material, thus it will not diffuse out of a gill system. The diver carries a small cylinder of liquified Freon and valves it into the gill to equalise the water pressure. When he swims back to the surface, excess Freon is released. Unfortunately Freon liquifies at 45 pounds per square inch, thus imposing a depth limit of 66 feet on the system. Eventually other heavy inert gases will probably be developed and used in future gill systems.

Diving with a 'gill' is safer than with scuba as the gases in the 'gill' are at the same partial pressures of gases in the water. With no excess pressure, nitrogen narcosis and the bends will be eliminated.

There are many forms of Scuba gear but the most favoured ones for deep diving are closed-circuit Scuba. The U.S. Navy uses a helium-oxygen gear known as the Mark series. These are rebreathing gear using a helium-oxygen gas mixture and were used in the three Sealabs. However, one system that shows great promise is the cryogenic helium-oxygen gear which was patented by Halbert Fischel and is fabricated by Sterling Electronics. This gear uses liquid oxygen which is rebreathed and permits diving at depths exceeding 1,000 feet. Each type of gear can stand improvements and refinements are being made.

However, there is still the problem of living for prolonged durations at high pressures which exist under the sea. With Scuba gear, men could work at depths only for limited periods and spend most of their time surfacing at various decompression stages. Therefore, one hour of productive labour by a diver would cost a full day's work. In 1957, Captain George Bond, Principal Investigation of the U.S. Navy's Man-in-the-sea Programme, propounded the theory of saturation diving. Bond discovered that a diver's tissues become saturated with gas after 30 hours and that the decompression period does not increase however long he stays down beyond that time. If men could live and work in the sea, it would be less costly in terms of time and money. Armed with this knowledge, the inventor of the Link trainer, Dr. Edwin Link,

carried out the first underwater living experiment in 1962 with one man down for 24 hours at 200 feet. Subsequently others like Jacques Yves Cousteau's Conshelf experiments, Bond's Sealabs and the Tektite experiments followed.

In the course of these experiments one important obstacle arose, that of the extreme cold existing in the great depths. The present day neoprene wet suit or the dry suit proved insufficient. It was found that the cold could numb the body and mind of a man to the point of helplessness and amnesia unless countered by an artificial heating device. In the Sealab experiments, a hot-water-heated suit was used by tethered divers, with the heated water supplied through an umbilical.

Now, a self-contained hot-water heater for a diving-suit, using radioactive plutonium has also been devised. Before long, we will probably be diving in comfort even in Artic waters.

Today we visit the shallow depths of the sea. Tomorrow, with further development and refinement of scuba gear, we shall live in great depths.

Terrence John Pflug
Pre-U. 2



Democracy As A Form Of Government

In the world today, two main forms of government exist. They are the "Democratic Government" and the "Communist Government". Most of the countries are either ruled by the democratic form of government or by communism. America is one of the leading countries with democracy. China and Russia are the main countries which are ruled by communism.

'Democracy' is a form of government in which the community as a whole can participate in governing the country. It stresses on political liberty, equality and freedom for all. As Abraham Lincoln put it, it is "a government of the people, for the people and by the people". Government representatives are elected by the people and the representatives sent to the Parliament are from the whole community. They are elected to rule the nation to ensure that the nation progress in all fields, for instance, in its economy, defence and education.

Unlike the Communist form of Government, the people are given a choice to vote when they have attained a certain age. This is known as political liberty. With this political liberty, the people of the nation concerned can test and examine the ability of the Government, which comes into power, to rule and and govern the nation. If it is incapable, another government will be elected in due course, usually after a term of 5 years.

In a democratic government often there are many parties being put into Parliament. In other words, opposition parties are present to make criticisms of the ruling party. If, a bill is passed through the Parliament, the opposition parties can make sure that the Bill is beneficial to the society. This can be done by weighing the pros and cons in a debate conducted in Parliament. In the absence of opposition parties it may be said that democracy does not exist in the country. But democracy can still exist through a one party system. The reason being that the opposition parties can be substituted by the presence of "pressure groups".

Pressure groups in Singapore, for example, are the Chinese Chamber Of Commerce, The National Trades Union Congress, the Singapore Teachers Union and The People's Association. To a certain extent, pressure groups are different from opposition parties because they do not represent any political party but the people. However, their function is almost similar to that of opposition parties. In any decision made by the Government which they think are unjustifiable and unfair to the people they can make known their opposition through the various official broadcasting organs and lobbies. This situation can be seen in our country, Singapore, which is ruled by a one party government, the People's Action Party but with many influential pressure groups.

In addition, the people of the community can also participate in political affairs. The people can voice their opinion through the Press and the various broadcasting organs. This is where the various informative media are brought into play. For any unfairness in policies made, the people can criticize and suggest remedies to the government.

Furthermore, this form of government also ensures that equal rights prevail among the majority and the minority. In this sense, it means that the majority and the privileged are not allowed to exploit the minority or those under-privileged. Equality usually prevails in a democratic form of government. The citizens of the country are being given equal chances in education, employment and recreation. They are not banned from anything except those which the Government considers would be detrimental and pollute the social and cultural environment. For instance, drug-taking and hippie culture are not allowed in some democratic countries.

Education must be present in the society which claims to be democratic because firstly, the people must be educated enough to differentiate between democracy and communism. Secondly, they must also be wise and critical enough not to succumb to emotional and empty appeals. Thirdly, they must know about current affairs and international politics so that they can elect a good and suitable government for their country. Regarding education, every child notwithstanding whether he is from a poor or wealthy family, is given at least a free primary education. When those students proved themselves to be capable of studying and they are from the poor sector of the community, they are then awarded secondary school bursaries or free school fees. This ensures that a large portion of the society will be literate and educated in their youth.

In schools too, students are taught to understand and criticize. They are being taught to realise the advantages and disadvantages of Democracy and its policies. Later on, they are taught to criticize in classrooms. These train the leadership qualities of the students so that by the time they go into society, they can have the courage to voice their opinions accurately. This can be seen America where students hold demonstrations for their cause against the government. In other countries too, protests are frequently held in support of their opinion against the policies and plans of the government.

Another advantage which is present in this form of government is that law and order must prevail. It is also true that law and order is present in other forms of government. But in democracy, the pressure of law and order only assists in bringing discipline to society and at the same time allows liberty for the people. For example, in a democratic country, people are given the freedom of speech which is restricted under the law in a communist controlled country. However, though people in a democratic country are given such liberty, they cannot take the law into their own hands. Whenever they commit any criminal acts which affects the security of the society, they will be charged accordingly and will be given a fair trial. For those who are victimised by the unruly elements of society, they are under the protection of the law.

Democracy also provides a responsible and a proper organisation of the ruling party better not only as individuals but in groups. Even those living in rural areas where information is poor are able to form their own judgement.

Given favourable conditions, like those mentioned above, democracy is one of the best forms of government in a sense that there is political liberty, freedom, law and order and equality for all members of the society. It aims at giving happiness to the largest possible number and tolerates the opposition parties. Democracy also allows for more improvement and progress for the people in a liberal sense.

Leong Onn Kay
Pre-U. 1 B.



The History of Zero and the Decimal Point

Zero

The invention of zero, like most scientific inventions, was not the work of just one mind. Zero took a different symbol from each of its inventors, namely, the Hindus, the Babylonians and the Mayas, before it assumed its present form — the shape of an egg.

The grandest achievement of the Hindus and the one which of all mathematical inventions has contributed most to the progress of intelligence, was the perfecting of the so-called "Arabic Notation". In perfecting the Notation, the Hindus created a symbol for zero known as "sunya" (or the void). It was found in the form of a dot in the *Bakhshali Arithmetic*, the date of which is uncertain. The earliest undoubted occurrence of the zero in India was in 876 A.D. In 1100 A.D., the Hindu Mathematician, Bhaskara the Learned, came up with the definition that if 'a' is any number, then 'a' minus zero equal to 'a', zero added to 'a' would give 'a' and 'a' multiplied by zero produced zero.

The use of the principle of local value in the sexagesimal system found on Babylonian tablets dating 2300 to 1600 B.C. revealed that they have invented their own zero. Babylonian records from the centuries immediately preceding the Christian era contained symbols for zero, which, however, were not used in computation. Their zero consisted either of two angular marks Σ , or the omicron θ , which were used regularly to represent the absence of a figure.

It could also be a possibility that the Mayas of Central America were the people who first introduced a symbol for zero. Perhaps five or six centuries before the Hindus gave systematic exposition of their decimal number system with its zero and principle of local value, the Mayas had evolved a vigesimal number system employing a zero and the principle of local value. Their symbol of zero looked roughly like a half-closed eye.

Decimal Point

We owe the first systematic treatment of decimal fractions and decimal division to Simon Stevin (1548–1620 A.D.) of Bruges (in Belgium). Stevin applied the new fractions "to all the operations of ordinary arithmetic". The only thing that he lacked was a suitable notation. In place of our decimal point, he used a cipher and attached a corresponding index to each place in the fraction. In his notation, the number, 5.912 would be written as 5 0 9 1 1 2 2 3. After Stevin decimals were used by Joost Biirgi (1552–1632 A.D.), a Swiss by birth, who prepared a manuscript on decimals soon after 1592 A.D. Other candidates who were related to the introduction of the decimal point include Pitiscus (1608 A.D.), Kepler (1616), and Napier (1616 A.D.). The divergence of opinion was due mainly to the different standards laid down for judgement. If the requirement made of candidates was not only that the decimal point was actually used by them, but that they must give evidence that the point was with them merely as a general symbol to indicate a separation, and that they must actually use the decimal point in calculations involving multiplication and division of decimal fractions, then the honour would fall on Napier who illustrated such use in his book, the *Rabdologia*, which he published in 1617 A.D. Napier's decimal point, however did not meet with immediate adoption.

MASER AND LASERS

Science has revolutionised our concept of the physical world. Innumerable scientific breakthroughs have resulted in the rapid transformation of our trend of thought and activities.

The invention of the maser and laser was hailed as one of the most remarkable achievements that had a profound impact on the future progress of the world.

Maser, in short (Micro-wave amplification by stimulated emission of radiation) was the result of the work of a group of scientists at Columbia University. Its basic principle is very closely related to the concept of movements and work of electrons. Without the thorough knowledge of the behaviour of electrons, the maser would not have come to light as early as 1954.

To produce a laser (light amplification by stimulated emission of radiation) it is necessary to pass a stream of photons through an active medium, which is bounded at both ends with parallel mirrors. Each time, the stream of photons (packets of energy) gain energy when it strikes the mirror. The light waves are reflected to and fro and thus amplified. A beam of intense light then passes through the partially transparent mirror.

The electron tube and klystron were able to produce waves i.e. radio waves which brought the world closer together. But they are not without faults. The electron tube can operate only when the waves are converted into streams of electrons. Moreover, a number of messages cannot be transmitted simultaneously because of the low frequencies of the waves produced.

Electrons orbiting round the nucleus of an atom possess kinetic energy due to their movements round the nucleus. The attraction of the nucleus on the electrons produces potential energy. The rich store of energy if properly manipulated can be used as a source of energy.

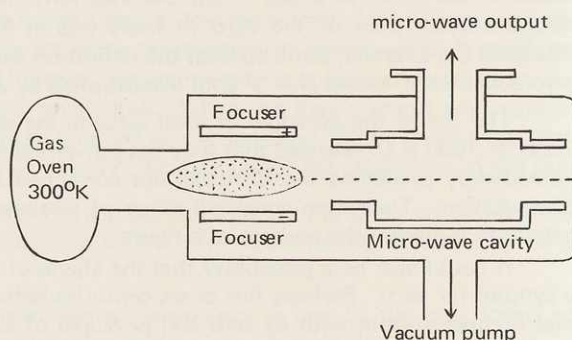
The amount of energy an electron possesses is determined by the "shell" it is dormant to move. In all atoms, K shells are nearest to the nucleus followed by L, M, N, . . . shells. In the state of excitation, the electron is pushed from one shell to the other until the nucleus is no longer capable of holding it. The electron is then free from captivity. During this process, radiation is given off. Thus, we can say that an "energy ladder" exists in an atom.

In general the "energy ladder" of an atom can be classified into three levels. By natural tendency, the minority atoms are found at the top-most level, more at intermediate level and the most at ground state. The major task of maser and laser is to excite and boost the electrons to the top-most level and allow them to descend. During the descent, photons (packets of energy) are given off. This process is called "inverting the population".

Ammonia Maser

The first maser used ammonia as an active medium. The three keys of the maser are:

- (i) to choose the correct material to produce the required frequency.
- (ii) to find a way to "invert the population".
- (iii) to amplify the stimulated emission.



(i) Hot ammonia gas is propelled by pressure difference through a focuser which extracts low energy molecules. High energy molecules continue into the tuned cavity to engage in amplification.

(ii) Inverting of population.

It was known that ammonia molecules react to a non-uniform electric-field that depends on the energy level. The field if properly adjusted will attract the low-energy molecules to the side. The high energy molecules continue into the cavity. Photons are knocked out and added to the stream of photons. Thus more and more photons are accumulated.

(iii) The intensifying process includes a resonance cavity that rocket the photons in the stream to and fro. A vigorous sustained oscillation is built up.

Ruby Maser

The ruby maser later replaced the ammonia maser because the ammonia maser was untunable and would only handle a very limited band of frequency.

Ruby is a paramagnetic crystal. It contains molecules of atomic mechanism that can react to applied magnetic field.

Not all substances are paramagnetic. The electron behaves like a magnet but there is a counter mate orbiting in the opposite direction.

The ruby consists of aluminium and oxygen atoms tightly bonded. . But at some point, 1 in every 500, the aluminium atom is replaced by (chorium) atom. This unique property of ruby meets the need of an efficient maser perfectly. The ruby thus reacts to the applied magnetic field.

In the ruby maser, the "inverting of population" is done by "pumping" in energy using a micro-wave generator. This effect is enchanced by cooling the crystals in liquid helium.

The photons are slowed down to allow time for interaction between photons and to excite the atoms. Amplification of the stimulated emission takes place.

Ruby Laser

Streams of intensely stimulated violet and green photons are poured into the active ruby

encounter with the mirror, photons are added to the stream, producing intense red light. Finally, an intensely amplified light is transmitted through the partially transparent mirror, in a narrow beam called laser beam.

Uses of Maser

The constancy of oscillation of the maser is applied to the measurement of time. The periodic motion of a clock is kept constant through the use of crystal control electrotube oscillator.

As an amplifier, the maser's performance is unparalleled by any other device. It can receive weak radio signals and amplify it. The low-noise of the mechanism is the moist unique property of the maser as an amplifier.

Uses of Laser

The laser beam is playing an increasing important role in the field of science especially in space research and communication.

A beam of intense energy projected into a small area can melt bore holes, illuminate and induce chemical reactions.

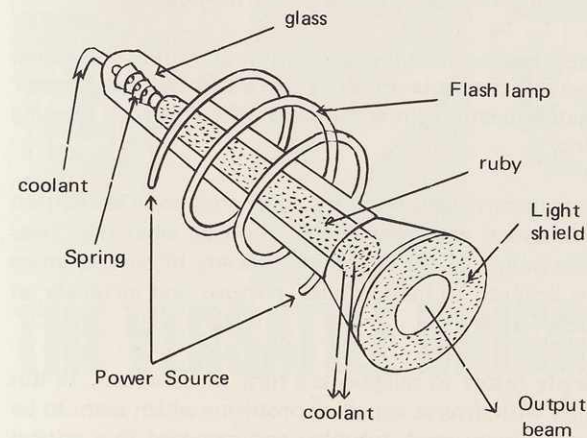
It is used to determine the spectra of materials the pattern of the absorption and transparency at different frequencies and wavelengths.

Lasers can determine velocity, distance and direction as well as size and form of distant objects through the reflected signals of radar.

In the Apollo space programme, laser beams carried messages simultaneously from earth to the space-craft and back to Houston.

Laser beam is increasingly being used in surgical operations. This extremely narrow and intense beam can cut through our skin without drawing any blood. In complicated operations, tiny instruments cannot match the laser both in speed and efficiency.

The immense potentialities of the laser remains to be explored and exploited. No other device can challenge the performance and accomplishments of the laser especially in space communication.



crystal in the shape of a cylindrical rod. Both ends of the rod are bounded by parallel mirrors, the light wave is reflected to and fro. For each

Goh Lye Huat
Pre-U. 2.

RELIGION IS THE OPIUM OF SOCIETY

Teo Hoon Hwee
Pre-U1B.

It is of paramount importance before discussing the theme: "Religion is the opium of society," to clarify the meaning of opium.

In this society that we are living in, we often tend to confine and even conjure up the idea that opium is for those addicted to it only and is therefore harmful. To a certain extent, this is so, but the fact that opium is a substance prepared from poppy seed used to relieve pain, cause sleep and smoked as a drug to soothe the sense, called for close scrutiny into the subject. It is only when we misuse and abuse opium that it is harmful.

Analogous to the good aspects of opium, religion can be more than a "sedative" to many human sufferings, if timely and lovingly embraced upon.

In our daily newspapers, we often come across people ending their lives by committing suicide because they find life meaningless and worthless. Furthermore, they feel that no body can ever truly understand them. Unfortunately, these frustrated souls had never encountered and resorted to any religion. If they only had, then they would have valued their lives as precious gifts bestowed upon them and would always be hopeful for their lives after death. Thus religion enlightens the meaning of life.

If there is one source from which a realistic sense of belonging can be fostered and enhanced, it is through religion. People who have bitter and unforgettable experiences are in a terrible position. They need profound love, understanding and guidance. Again religion can help in enlightening the mind.

In this materialistic and deteriorating society of ours, there is a call for religion to play a dominant role. At present, where war in which nations rise against nations; chaotic situations; and degrading morality like fornication, adultery, hatred, jealousy and others are prevailing, religion with its remarkable doctrines can help alleviate some of these human weaknesses and helplessness.

Religion also propagates peaceful and harmonious living analogous to the law of the country.

Like other professions which are careers of many people, religion can help in providing vocational choices for believers. Anyone, who feels the call to serve in a particular ministry can either become a pastor or a priest. At such, religion in a very good sense creates vocation for enthusiasts who truly have burning desire to express and render their services whole-heartedly.

Religion, it must be confessed, strongly condemns materialism, there by advocating total abstention from materialistic striving. It teaches people to be contented with their living, knowing what their lives after death would be. This sounds contradictory to the policy of the very taxing society of ours, to strive for better living. Therefore, religion in this respect is believed to indoctrinate, nurture and inculcate an anti-government, lazy and apathetic attitude to the society.

There was no doubt that people often thoughtlessly resort to religion as a form of Escapism. In this society that we are living in, we are faced and confronted with diverse appalling problems which seem to be insoluble. Owing to these problems, people are greatly discouraged, troubled and menaced to a critical point that they run away from realism to escapism which is a real tragedy. Unless people dare to encounter and wrestle face to face with problems, hardship and maturity, there is a slim chance of maturity and progress in many spheres of life.

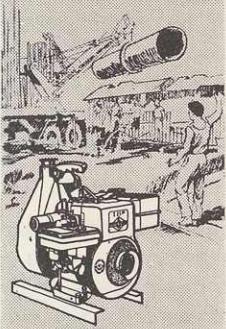
Comparatively speaking, religion tends to indoctrinate personal isolation from society, encouraging hermits to live in secluded places. At such, religion is doing no good other than inflicting the society by being "neutral, inactive and even deaf" to the growing need to contribute in the society of ours.

If wrongly conceived, religion can "breed" an multitude of fantastic and narrow-minded people. We hear so often of so called "devout" believers who on the verge of death, even refuse to seek indispensable treatment from qualified doctors, for fear of having no faith in their God. Considerable proportion of lives are taken away unnecessarily in this case. Thus it is more than crystal-clear that religion has this pitfalls and dilemma.

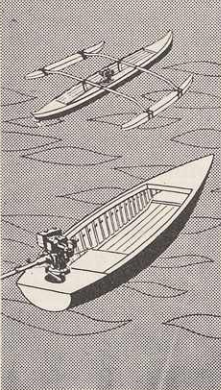
Taking a look at Belfast and the communal society of India, needless to say, one will instantly realise what religion has on these two countries and even others although not so obvious. It has inevitably caused unnecessary bloodbath and human inflections. It has bewildered people everywhere and encourages atheism to consolidate itself. Sympathetically and sensibly speaking, religion is not solely to be fired at as mentioned before; religion must have been abused by so called devout believers.

All in all, religion is really the "opium of society" in that it serves its purposes. It has its good aspects in contributing many sedatives "towards the well-being of our society". At the same time it has its undesirable effects in impeding the progress of our society when abused.

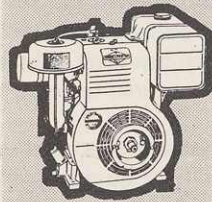
Construction Industry
Centrifugal Pump



Marine Application
Inboard or Outboard



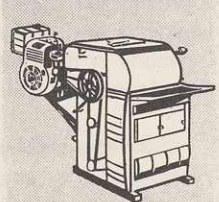
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It has been stated that "War has never achieved anything and never will". How far do you agree with this statement?

Ever since prehistoric times, man has been a cartankerous creature. If a few attempts at setting differences in a peaceful manner prove abortive, the final resort has always been an outburst of violence. For few, like Adolf Hitler, Benito Mussolini, Napoleon Bonaparte, this was the only solution; this was the only way to prove one's superiority. But history has shown that recourse to violence is never the correct answer to any problem; the starting of a war brings only misery, hardship and famine, and the title it achieves is no achievement at all when it has to be at the expense of lives of our fellow men.

In the first half of this century alone, the world has been plunged into two world wide devastating wars. What were the results of these two wars? What catastrophe have been wrought? And have they achieved anything?

By the time the 2nd World War drew to a close in 1945, millions of young soldiers, sailors and airmen had been killed in the fighting, untold numbers of men, women and children had died in concentration camps and under enemy fire, and many more were homeless, maimed and starving. This was indisputably the aftermath of the war. And the only "achievement", if achievement it is, was the formation of a new peace organization to replace the powerless League of Nation. This was the United Nations Organization.

True, since its formation the U.N.O. has by means of its international "police" forces averted many minor outbreaks of war, but can it really maintain peace in the world? It is well to have faith in the U.N.O., but the mere fact that one of the "superpowers", Communist China is not even a member of the Organization, reveals to us manifestly that it takes more than a U.N.O. to maintain stability in the world. One of the aims of the U.N.O. is pressure the superpowers to agree to a disarmament. Now, even if Britain, the U.S., the U.S.S.R. and France consented to disarm — which is an unlikely fact — Red China would never. And what is the purpose of disarmament if there is still one nation with nuclear capacity, which isolates itself from the rest of the world? Therefore in this respect, the U.N.O. since its formation, still has not accomplished its duty.

It has been said that without the two world wars, man probably would not have attained his present days technical and scientific excellence. During the war years, a big jump was made in scientific researches. The radar, the installation which helped the winning of the Battle of Britain, was one of the most important inventions. The aircraft, frail and ungainly, in the days of Wright brothers, was changed into the highly sophisticated fighter planes of World War Two, such as the Spitfires and Stukas. From planes such as these, engineers and designers have developed the supersonic planes of today. Progress was also made by the Germans in the field of guided missiles. And, this invariably led to the space successes of the Russians and Americans who utilize the knowledge of the captured German scientists.

To the technologists, these are real achievements. But to the masses, to those who have suffered the tyranny of wars, such developments are literally of no significance. A great majority of the world is made up of ordinary people — people who have no needs for any radar, people who hardly or never board an aircraft, let alone the spaceship. If the wartime discoveries do not improve their lives, can we really say that they are achievements? The answer is a definite "no". Moreover, just reflect on what it took during the war to invent all these — speaking for the masses — worthless devices. The Jewish population was nearly wiped out. Enemy control of seas and skies reduced countries to famine. Wealth and resources were wasted; historical sites and national monuments were reduced to rubbles. And most important of all, the war effort consumed all resources of the countries at war, land discoveries in fields more related to the lives of the ordinary layman, came to a sudden stop. Can we therefore say war has achieved anything?

War never solves any disputes which cannot be resolved peacefully. It serves only to open man's eyes to his own folly any insufficiency, and its purpose ends there as such. If achievements there are, they come only at the expense of "blood, sweat and toil".

**Tan Boon Hock
Pre-U. IA.**

TOO LATE

The sky was gloomy and dark. The night was windy. The relentless, unremitting, racing winds swept down across the village mercilessly.

The storm was shrilling its way through, up-rooting trees and sending attap roofs flying, along its path.

The furious rain, a fusion and partner of wind, beat down on the village without regrets.

I was all alone with my dearest mother in our little humble hut in this unusually dark and unruly night.

Mother had been looking after me, her only child, ever since father was killed in a car accident ten years ago.

She was taken gravely ill and was groaning, whimpering, wallowing and coughing with great pain and difficulty against the eighty-pieces orchestra of nature in its fullest swing of insanity, with thunder, its bass putting up a great show and lighting up the stage now and again.

They seemed in aim and strike directly on the zinc roof of our hut.

I had a premonition that this tempest and the orchestra of nature would end with me bearing a great loss.

Mother's condition deteriorated and I knew it was hurting her pretty badly but she was not admitting it to me saying she was doing all right.

Her face was pale. I decided to run the couple of miles in this tempestous night to get the village doctor to attend to her.

Reluctantly, I scamped into the unwelcome dark moonless night, defying nature.

With rain beating down on me forcefully and lightning blinding me, I ran like a mad man on his freedom, setting out in a frantic race against time.

I drove myself along at an exhausting pace, knowing that every passing moment would bring death one step nearer to her.

My legs were as heavy as lead as I struggled forward, with the roaring wind threatening to blow me off altogether.

It took all my strength to keep anywhere near my intended course.

After wakening the village doctor in his sleep, both of us struggled our way through.

When we arrived home my fingers were frozen.

I was stunned and felt a sort of cold shudder run all through me. I was already too late, I realised.

Though she was not dead, I knew that the end was very close and so we both watched and waited in silent grief until she breathed her last.

Finally, her faintly beating heart stopped and her eyes were about to close, when I called her name very loudly but the sound of my voice could not bring life back to my dear mother.

There was nothing that the village doctor could do.

I knew she had a lot of things to tell me but was too weak to do so.

Leaning my head down on the bed, I grasped her hand and cried as I never done before.

Why, why had nature taken away what was given to me?

The gruesome rain storm had left a deep scar in my memory.

TAN YEOW HEE, (David), 16+, Queenstown Sec. Tech. School. Sec. 4E A.M. Strathmore Avenue, Singapore, 3;

The Rise Of A New Science — ELECTRONICS

Control of electrons — those invisible particles of negative electricity that exist in the atom — have a profound influence on man's future. When electrons flow along a definite channel — the insulated copper wire that leads to your toaster or vacuum cleaner, or the transatlantic cable lying on the ocean bed — they produce the phenomenon known as current electricity.

Uses of Electronics

Scientists have found new ways of putting electrons to work by causing them to flow thro' space in an electron tube or to make their way thro' the crystal framework of a transistor. The starting effect produced by such electrons lay the groundwork of a new field of science called electronics. This science has resulted in the development of radio, television radar, the photoelectric cell, electronic welding, the electron microscope, electronic calculators and thousands of other useful devices.

Discovery of Electronics

The researches that led to the development of electronics date back to the discovery of the electron. The word itself was coined about 1890 by the Irish physicist George Johnstone Stoney; but he did not use its modern meaning. It was not until several years later that the electron was finally identified. In April 1897, the eminent English physicist Sir Joseph John Thomson, announced to a skeptical audience of scientists at a meeting of the Royal Institution that he had discovered certain hitherto unknown corpuscles of electricity. They were, he said a thousand times smaller than the smallest atom known — the atom of hydrogen. These corpuscles were the particles of negative electricity that were later called electrons.

"The research that led to the discovery of the electron," Thomson said later, "began with an attempt to explain the discrepancy between the behaviour of cathode rays under magnetic and electric forces. After long consideration of my experiments, (performed by passing electrical discharges thro' vacuum tubes from which most of

the air had been evacuated by pumps), it seemed to me that there was no escape from the following conclusions:

"That atoms are not indivisible, for negatively electrified particles can be torn from them by the action of electrical forces, by the impact of rapidly moving atoms, by ultraviolet light or by heat."

"That these particles are all of the same and carry the same charges of negative electricity. . . . that they (electrons) are a constituent of all atoms."

For a time, many scientists were unwilling to admit the existence of electrons, since Thomson's demonstration had been on a pure theoretical basis. The Scottish physicist C.T.R. Wilson (born in 1869) did a great deal to convince his fellow scientists that these invisible subatomic particles exist. Utilizing the apparatus called the Wilson cloud chamber, he succeeded in taking photographs of the paths of individual electrons thro' a cloud of mist. The American physicist Robert A. Millikan (1868-1953) likewise contributed to the knowledge of the electron. He measured the electric charge; he also calculate its mass, which turned out to be 1/1838th the mass of a hydrogen atom. Both Wilson and Millikan received the Nobel Prize in physics for their work.

The great American inventor Thomas A. Edison, in 1883 made a special electric-light bulb, in which a little metal plate was sealed near the filament. A current was allowed to flow thro' the space inside the bulb between the wire and the plate, producing a faint blue glow. Edison was unable to explain this striking phenomenon, which came to be known as the Edison effect.

In the early 1900's, an English electrical engineer, John A. Fleming (1849-1945) built a special kind of tube based on Edison's modified light bulb, and he began to study carefully the flow of current between the filament and the plate. He came to realize that the Edison effect is due to the heating of the filament, which causes electrons to "boil off" into space from the metal.

He found that his tube, which he called a valve, was a good rectifier of electricity. Fleming used his valve as a detector for wireless telegraph signals. It was the first electron tube.

The most important improvement in the electron tube was made in 1907 when an Iowa-born inventor, Lee De Forest added a grid to the tube of Fleming; the grid was mounted between the filament and the plate. The grid in an electron tube is negatively charged. They tend to be repelled from the grid and only a small number reached the plate. By increasing or diminishing the negative charge on the grid, it can be made to regulate the flow of electrons to the plate. This means that not only can electrons be sent through space but that their flow can be controlled with great precision.

De Forest called his electron tube an audion tube; it was also called a triode since it was made up of 3 elements (filaments, plate and grid). The audion tube was seen applied to the transmission and reception of radio waves. The audion helped Marconi to detect radio wave signals for more effectively than ever before and also to amplify them. De Forest himself was responsible for more than three hundred inventions in the field of electronics.

Most of the electronic devices of the twentieth century are ingenious applications of the electron tube. Today there are hundreds of different kinds of these tubes, some as small as a thimble, others as large as man. Besides detecting and amplifying radio signals, they can turn alternating

current into direct current and they can switch independent circuits on and off. A special kind of electron tube, called photoelectric cell, can transform light into electricity.

The transistor – a rival of the electron tube

In June 1948, the Bell Telephone Laboratories announced that they had developed a tiny device that could do practically everything an electron tube could do – and at far less expenditure of energy. They called it a transistor. It was not much to look at – simply a small slice of the metal germanium, carrying two fine wires on top and heavier wire soldered underneath. The ingenious device was due primarily to three men – William B. Shockley, Walter H. Brattain and John Bardeen, who won the Nobel Prize in physics in 1956 for their achievement.

Further development of the original “contact point” transistor and one similar to it, called the junction transistor, opened a whole new field of practical electronic engineering. It made possible the miniturization of all kinds of electronic devices, from radios and hearing aids to the scientific instruments used in space probes. It added greatly to the usefulness of high speed electronic computers, such as UNIVAC and MANIAC. They could now store much greater quantities of information in their electronic “brains” than before.

Ho Tiong Yong
Sec. 4E1.



FUNDAMENTALS OF THE RADAR

Today Electronics has enabled man to put machines on Mars and Venus, guide them across miles of space, with the radar. Accuracy must be true to third or fourth place of decimals.

Eversince radio waves were discovered, it is known that waves can be reflected like light. Now, a century later, radars evolved into highly complex devices. The word 'radar' stands for Radio Detection And Ranging.

The basic idea is very simple. Objects, especially those made of metal, will reflect waves that we produce. Radio waves travel at a constant speed, so the distance to any object is proportional to the times interval between the sending of the wave and receiving it. A larger portion of the wave will be reflected by longer objects, so that the echo will appear bigger in the receiver screen.

The actual echo will depend greatly on the 'radar cross-section'. This in turn depends on the relative location of the radar and the object.

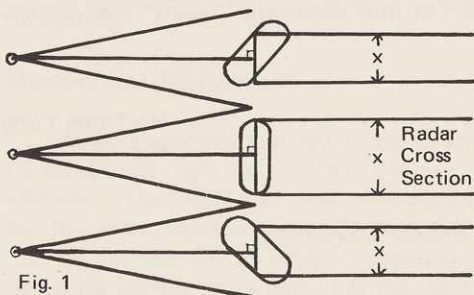


Fig. 1
EFFECTIVE RADAR
CROSS SECTION X

However, a 'radar-beacon' will appear as big as a ship when it is actually less than ten feet across. This beacon reflects a large portion, if not all, of the wave, as shown in Fig. 2. These are used in weather balloons to ensure easy radar tracking.

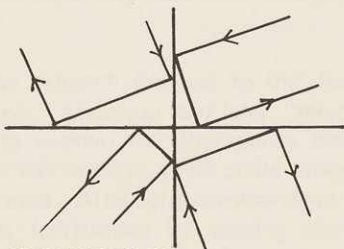
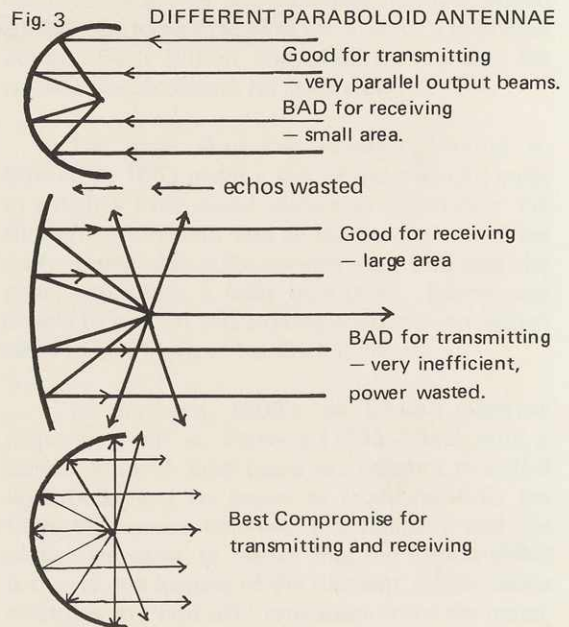


Fig. 2
SPECIAL PROPERTIES OF
A RADAR REFLECTOR

A search of an area can be made by systematic movements of the antenna. To have a beam of waves is more difficult than to diffuse it all round like an incandescent lamp-without any reflector. Why do we prefer beams? The reason is evident from the search light example. A search light can light up a further range than a plain bulb, even with the same power.

The paraboloid is the best shape for antenna (a reflector). It can focus waves into a parallel beam and vice versa. Even with a beam, it is necessary to use a narrow beam. We certainly cannot paint small details of a landscape with a coarse brush. Likewise, a narrow beam gives more accuracy. This narrow beam requires the antenna dimensions to be large compared to its wavelength (λ , lambda), yet it must be small enough to be moved easily. Thus the wavelength must be small. In practise, this is usually between 1 cm. and 50 cm. or 30,000 - 600 mc/s respectively.

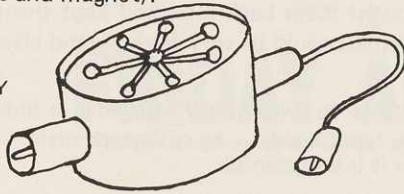
Spacing of the antenna driven element is important. In Fig. 3A, a beam is produced, but the parabola has a small area, not too good for receiving echoes. In Fig. 3B, the dipole is placed so far out that only a small portion of the reflector is constructed. As seen, much energy is wasted. Fig. 3C is a compromise of the two above extremes; it has the best shape.



Perhaps we would ask: Can we get an echo from a 'medium wave broadcast' wave (540–1600 kc/s)? The answer is, no. In order to be reflected the wave must have a wavelength much smaller than the target. In the case above, only objects approaching the hundred foot mark can produce a suitable echo for the receiver.

Although we now have an ideal beam, it must not be switched on for too long a time. It should stop transmitting so that the very sensitive receiver can listen for echoes. The magnetron, which generates these waves, must 'rest' so that it can live longer. All the kilowatts of power comes from a device that can be held in the hand (without cooling fins and magnet).

Fig. 4
MULTI-CAVITY
KLYSTRON
— opened view.



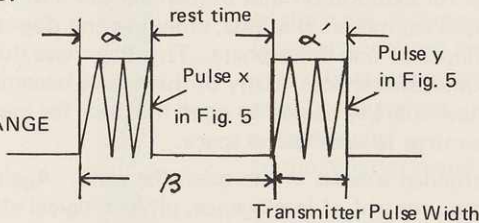
As the wave is being transmitted at regular intervals, they are 'duty-cycles'. This rate of repetition affects the accuracy of the radar as a whole. If this rate is fast, the range must decrease as the rest-time is being taken up for transmission. The accuracy penalty occurs only if the target is moving relatively fast. With a slow repetition rate, the first 'contact' with the target, we may find it at x-say.

Fig. 5
Slow Repetition Rates
— Disadvantage



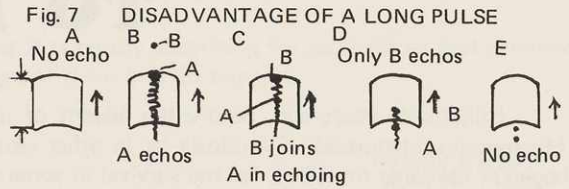
As the transmitter is silent, receiving the echoes, the target may have moved a considerable distance (y). At the second contact Y, the pulse in the screen appears well away from x — without travelling step by step from x to y. In this way, no information will be available between x and y, as in Fig. 5.

Fig. 6
RADAR RANGE



The range of the radar is determined by the time interval between the pulses, as shown in Fig. 6, represented by β . If β is made longer, longer ranges are possible. This interval is of a few microseconds. As radio waves travel 186,300 miles per second, one can easily calculate the distance to the object. This period of time must be determined very carefully as explained in Fig. 5,

The transmitted pulse, represented by α in Fig. 6, must also be timed carefully. Too long a pulse will give poor results, as illustrated below.

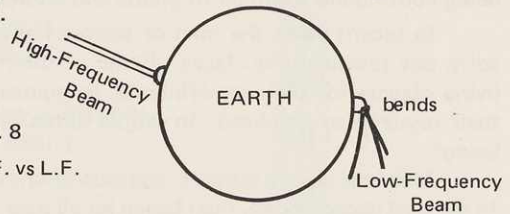


In Fig. 7a, a long pulse approaches 2 targets A, B lying close together. Only 'A' echoes as Fig. (b). Both A and B echoes in Fig. (C); as B join in, there is no break in the echo. In Fig. 7D, A stops echoing, and Fig. 7(E) shows both targets stop echoing.

This is a rather serious matter in wartime. Many ships may be sighted as only a few. This can lead to success or failure.

The frequency factor of the wave must be chosen very carefully, for it determines many other important factors. To begin with the antenna will be large for the lower frequencies. This results from the narrow-beam factor discussed earlier and the driven element, being half as long as the wavelength, will be too long. Low frequencies can also travel faster than the higher exponent, and, however, this is not advantageous. Since hot and cold air can exist side by side, a wave travelling through it will be bent. Thus, targets will not be where they are thought to be. High frequencies are absorbed by water vapour and carbon dioxide in the atmosphere. Either more power must be used or the range is shortened.

Fig. 8
H.F. vs L.F.



Rain, fog, snow and smoke can sometimes confuse the radar operator with a H.F. set. As the wavelength is much smaller (higher frequency) each raindrop, dew-drop, snow flake or dust may cause an individual echo. The receiver, taking in all these signals, will cloud up the radar screen. Any object can thus 'hide' in a heavy rain, etc.

Thus the fundamental concepts of the wonder, radar, have had been discussed as a parting word. I hope this will arouse interests in the 'would be' or rather 'should be' scientist to strive hard to make this radar even better.

Chan Yew Cheong
Sec. 3E2.

THE VALUES OF ANIMAL TO MAN

Billions of years ago, before the advent of man on earth, animals roamed far and wide and plants blossomed undisturbed. Symbiosis, or in other words, mutual help and effort for the benefit of both also began at the same time, but, for the survival of some species of plants or animals, it had to feed on the other. Yet, throughout the countless number of years this system of living has been in balance.

Then, man came to the scene. He was the most intelligent animal at large. When he came, he saw so many things to be done — he needed protection from the weather and the ferocious, he needed food and water and he wanted to explore.

At first, he hunted for his food. Slowly, he brought them back alive and kept them till he needed them. From this method, he discovered that certain animals could be very friendly and affectionate and so slowly he began to rear pets.

Man's behaviour and the methods he used then began to evolve until what man is today. Yet, today, after all that evolution, man still depends on these few basic needs — he still needs meat from the animals and he still gets them by slaughtering them, though now it is less painful.

What else are the animals good to man, besides giving him food? The answer may not seem too simply and obvious, and only because it really is not.

Man's best friend is the dog. The dog is faithful, loyal, obedient, considerate and also soothing to man's feelings. He has always helped man — in hunting and other games, in tracking animals and in protecting the household.

The cat is kept for pleasure and for ridding the house of pests such as the rat.

The keeping of useful pets is therefore good in more than one way. But perhaps the most important way in which animals are helping us is the fact that the animals are constituting a factor for the presence or existence of mankind.

To live, man needs air, he needs oxygen. Oxygen is supplied by green plants. Green plants need carbon dioxide. Animals supply this. Of course man gives off carbon dioxide too, but the amount he gives is not enough. Building on this fact is the 'Food Cycle', a process in biological sciences in which food is being continually supplied to plants and animals. Without one, we cannot have the other.

In recent years the man of science has embarked on many a journey — a journey which he hopes will solve one problem man faces. Some of the most important studies were ignored in Biology. Scientists need living objects for their experiments, so guinea pigs and other test animals were used to insure the safety of their research to mankind. In simple terms, animals are "risking their lives to safeguard their master's well-being".

Man was born a curious, anxious-to-know being. His curiosity increased in proportion to his growth. In the past decade or so, man began an all new frontier for exploration that of manned space flights to know more about our heavenly neighbours. Many times have animals such as rats, monkeys and dogs substituted man in such pioneering ventures beyond the outer limits of our atmosphere. This they have done, for the safety of man to discover more for man about the unknown space. Many of them have become sacrifices for the cause, but the cause was a great one. They have literally helped to open the door for man to space. They have helped in a big way to satisfy our thirst, our urge to understand space.

Ventures not so popularly known have also attained success in the scientific field. Again different animals are used in experiments on brain development, control of intelligence, psychological effects-cause and course, body development, effects of stress, loneliness, crowdedness on individuals and heredity and genetics.

All these very valuable experiments have given much hope and knowledge to man. Factors that have enabled these successes include numerous animals. Animals have been the targets of many of these experiments. Animals are helping us to know ourselves better to better know the. Why? and How? and When? of ourselves on this planet earth.


Animals are also important in fields like ecology and history. They help solve many problems involving the mysteries of the past and distribution of life on earth.

At present, we face problems of over-population and insufficient protein diet. We say resources on land are limited and turn to the sea, but in the sea, the fish that we catch are also animals, the algae we cultivate are also plants. Science tries to answer these problems by producing high yielding crops and productive animals. The 'guinea pigs' for testing these for side effects are again animals.

Animals are of such great importance to us that it is hardly surprising for us to know that primitive man worshipped these beings as Gods and carved images of them in their temples.

Victor Yeow
Secondary 3E1.

FRIDAY AFTERNOON



stench of hydrogen sulphide,
rolls in
from the canal beyond.
handkerchiefs are drawn,
as noses get irate.
a minute, two minutes, three minutes
but it lingers on,
reluctantly
thro' the forty-minute.

eyes roam aimlessly around,
resting on closed books, (cellophane bound,)
on the crawling watch,
and on the teacher's starry eyes.
they travel thro' the dusty panes
on to the snarling noon traffic,
on Margaret Drive; or
on to the patrol man swearing to his gods,
or across to the tall white building,
on Kay Siang Road.

an outburst of tempers
in the room above and
a fling of steel seaters,
send heads araised.
a distraction?
to the relief of many a daydreamer.

friday afternoon after twelve,
this is, WAS, will be
in many a classroom
AS THE WEEK PETERS OUT.

May



村居

陸耀忠



從小孩的時候起，我就熱愛鄉村生活，在那裡有着樸實無華、熱愛勞動的村民，有着數不盡的樹林和不知名的花草，空氣非常清新。

假期中，我到過一個鄉間去住。坐了一個多鐘頭的車，才到舅父的家，下車後，就受到表弟們的熱烈歡迎與招待。

每天大清早，樹上的小鳥在樹枝頭歌唱跳躍，鳥兒們的叫聲吵醒了正在熟睡中的我。我伸了伸懶腰，跑出房外，才知舅父的一家人，早已起身幹活去了。

中午時分，強烈的太陽高高在天上，有很多孩子們正在菜園中、田里，勤勞地工作着。就在這時候，我却在林間的草地上，閱報看書，看到他們辛勤工作，真使我感慨萬分，想起在城市中的我們，有着優良的環境，竟不知自愛，不好好地念書。

在這鄉村中，雖然每人都晒得黑黑的，臉上有着繃紋，手脚有被野草割傷的痕跡，這一些都是他們勤勞的標誌。然而他們的生活過得十分快樂，他們吃的是粗茶淡飯，穿的是破舊衣服，他們生存的意志，比任何人來得堅強和有意義。

我在鄉村中，雖然住了不久，但使我深深地領會到鄉村生活的樂趣，沒有汽車嘈聲，夜總會，酒吧雜鬧，只有勤勞的人們，四處樹木花草的寧靜。

時間飛快過去，幾天愉快鄉居生活，眨眼間消逝了，我拿着皮箱，向舅父告別，便依依不捨地離開這可愛的鄉村，向車站走去。

悔

3M4

卓福利



「噹……噹……」牆上的時鐘敲了十一下，我便收拾課本，準備上床，忽然從一本書裡掉出一張照片，我拾起來一看，原來是五年前失蹤的表哥，當我看到這張照，我便想起一件使我非常慚愧的事。

這是發生在五年前的事，那時我才十二歲。有一天當我放學回家的時候，媽媽告訴我，表哥來投靠我們。表哥比我大一歲，為人很誠懇，又很聰明。當他來我們家裡的時候，我們都很高興，爸爸媽媽也很疼愛他。日子一久，我發覺媽媽對待表哥，可說是無微不至；以前她把我當掌上明珠，可是現在却轉移到表哥身上，不令我嫉妬才怪呢！

有一天，我們全家人要去看戲，表哥因為有點頭痛，所以沒有去。當我們看完戲回家的時候，我便大聲的跟媽媽說我要交的六塊錢學費不見了。媽媽叫我不由分說的指定是表哥偷了。接着我便衝進他的房間里，在床底下找出了六塊錢。表哥一面流着眼淚，一面說他真的沒有偷。可是事實擺在眼前，令他分辯不得。

這件事情過後，表哥整日悶悶不樂，我却洋洋自得。可是，過了幾天，真相敗露了。我的詭計被父親揭穿，原來那天晚上，我把日記簿放在房里，忘記收拾好，被父親看得清清楚楚。隔天，表哥留下了一封信，便靜悄悄地走了。後來，爸爸對我說表哥是個孤兒，無依無靠，才來跟我們一起住。現在，不知他的去向。我覺得非常懊悔。

想到這裡，我情不自禁的流下眼淚，我希望表哥會回來，希望他會原諒我。可是我等了五年，還不見表哥。也得不到他的消息。我覺得萬二分的對不起父母，對不起表哥……



人生的希望

葉桃蓮

Doreen Yip P. U. 1A

我們為什麼活着，或者，有人沒有想過這個問題？但這是人生最重要的問題。不管你已經想過多少次，或者現在才去想，我相信你們的想法大概和我一樣，我是為了「希望」而活着的。

對了！為了「希望」而活着。世界上的每一個人，沒有不是為了要實現他們的希望，所以才一天一天地活下去。希望對人生是多麼重要；希望使人在艱難困苦的生活環境中有奮鬥的勇氣；希望好比是人生的動力，你越是對生活抱着希望，你的生活便越過得有意義、生動、多姿多彩；相反的，如果你對生活感到失望、無望，甚至絕望，那麼，你便會陷落到痛苦的深淵裡，你會感到整个人生沒有意義，活着沒意思，在此，若是遇到失意的事，他們甚至會自尋毀滅——走上自殺的道路！從這裡，我們可以看到「希望」對人生所產生的影響是多麼巨大的啊！

希望是生的動力；活着是人的天職，上帝創造人類，原是希望我們能夠好好地，快快樂樂地生活着，所以除了賦給人類思想、智慧、精力之外，也讓人類有希望，教我們為了這希望而活，為這希望而創造美好的將來。因而人類為了達到希望而努力奮鬥。因此，活在世界上的無論那一種人，都有他們各自不同的希望。從年紀方面看來，小孩子希望有很多玩具糖果；青年們希望唸完中學進大學，同時也希望將來能找到一位理想的伴侶，建立一個美滿家庭，和有一個理想的前途；中年人希望生活能夠安定，兒女聰明，事業成功，家庭幸福；老年人希望有個安逸的晚年。從職業方面來看，執政者希望和樂昇平，國泰民安；做官的希望平步青雲，步步高陞；學者們希望讀破萬卷書，學識淵博；商人們希望生意興隆，財源廣進；工人們希望技藝超群，巧奪天工；軍人們希望兵精將勇，百戰百勝；學生們希望年年升班，品學兼優。此外人們還有各種各樣的希望，比如有人希期將來做醫生，做教授，做律師，做銀行家，做大教育家，大畫家等等。人們的希望，真是講也講不完，數也數不盡。人們

就是在這講不完數不盡的希望當中，選擇他們自己的希望，然後為了達到這些希望，他們才一天一天地活下去，一天一天地奮鬥下去。在生活的過程中，人就希望能逐一地去實現。然而，為什麼有些人的希望能夠實現，有些人的却不能實現呢？這是要看各人的信心意志和毅力怎樣。

能夠達到自己的希望的人，就是一般人所謂成功的人。一個人要想達到成功，絕對不是一件容易的事情，他必須要有信心，有堅定的意志和肯努力奮鬥的精神，然後才能使他的希望實現；那也就是說：他必須要有恒心，有超人的毅力。我們試看古今中外成功的偉人，他們那一個的生平，不是對生活充滿着希望，對事業抱着堅韌的毅力去幹。推翻滿清的孫中山，發明鎊的居里夫人，還有許多許多的成功人物，他們抱着何等熱烈的希望！為了實現這些希望，他們曾表現出何等堅韌的毅力！終於他們都成功了，都成為千古人類的典範。一個光是有着各種各樣的希望，而沒有毅力去實現這些希望，那麼，他的希望就等於幻想，甚至是妄想，一輩子也不能實現，一輩子也無法成功。

一個沒有希望的人，雖然他是活着，但是他却等於一個廢物。無論對他自己或是對社會都不會有什麼好處。甚且還會痛苦一輩子，因為他的希望無法實現。

一個有希望兼有毅力的人，才是一個可能成功的人。不論什麼人，只要他肯秉着自己的責任，照着自己的環境，依着自己的才能，努力奮鬥；不怕艱難，實現希望，這樣對社會才有所貢獻，留下一點值得人們留念的事業，成為人們稱讚和敬佩的典範人物。這樣才不負此生。

我最喜歡的 的 課外活動

郭紹棠 4E2

近年來，本國的教育政策有了極顯著的改變。這是爲了響應我國總理的呼喚：「建設一個剛強勇猛的國家」，因此，從今起，學校當局除了注重課本上知識的灌溉之外，還提供了許多的課外活動讓學生參加，以便使他們在學識上和體魄這兩方面都達到盡善盡美。

課外活動可分爲兩大類：一類是制服團體，如學生海、陸和空軍隊，學生警察隊，聖約翰救傷隊，紅十字會，銅樂隊和童子軍。另一類是非制服團體活動，又可分爲學會及體育兩方面。學會方面也包含着：中文（英文）學會，算術及科學學會，文藝及演講學會，史地學會，無線電學會等等。真是多采多姿。體育方面也不遜於學會方面，它包括田徑，球類，柔道，跆拳道等。

自從這些課外活動被介入學校以來，學生們都很踴躍的參加。可是一個人是不須要參加太多的課外活動的，否則那來時間作功課？參加太多的課外活動，不但有損個人的身心，而且會成爲學業上的一種不必要的妨礙。

我最喜歡的課外活動，就是學習無線電的知識。本來嘛，我對無線電這一行是一無所知的，可是，自從成爲本校的無線電學會的一個會員後，我就一直被這門莫測高深的學問吸引着。那些奇特的電子零件以及它們的操作功能使我這「井底蛙」感到新奇且有趣。再加上電子是我們這幾班比較優秀的學生所必修的工藝課程，我對它的興趣也就更加濃厚了。不可否認的，我們現在是生活於一個電子的世界上。電視機，電唱機，收音機以及許多種娛樂的媒介都是由多種電子零件結構而成的，電腦，電子計算機，一切電子探測儀器，更不在話下。還有數不清的器具都是利用電子零件作媒介而能以操作的。

我校的會員所學習的無線電技術的範圍很廣，從原子學說至無線電真空管的功能。單在這方面的費用，製造無線電收音機，都足以使我束緊褲帶，省下數目極微的零用錢來購買那些電子零件。可是我所省下

的零用錢畢竟有限，又加上電子零件的價格昂貴，遇到一個價錢最少要七、八塊錢的真空管或是變壓器也是有可能的事，而我省下的零用錢和它們的價錢比較起來時，簡直是「小巫見大巫」，少得可憐。因此，我時常向父親討錢，幸而父親是個明理的人，從不口出怨言，只是勉勵我要學以致用，我也希望這門技術能够成爲我的終生事業。然而這並不是等於說我必須放棄所有的課程來致力於無線電，這可不是我的想法。

除了學習無線電知識之外，我也必須努力把其它的科目搞好。嚴格說起來，無線電只不過是種課餘嗜好，何況我在學校所學習的只不過是些基本原理，根本不能稱爲純粹的專科。由於我的志趣在於無線電，所以我打算在中四畢業後，如有可能的話，進高中就讀，不然，就去申請進入博理工藝學院唸一門電子學系。



歲暮市場

陳澤方 4M3

真討厭，每達到這時期，他們總是這樣的：高聲叫喊。這一晚，又是如前幾晚一樣，吵吵鬧鬧，使我睡不着，便索性溜出去，看看他們在搞什麼鬼。在那裡，盡是些五顏六色的電燈，也有些「土油」燈，把那條平時最暗的巷子照得如同白天一樣的光亮。人很擠，而且很熱。

只見差不多每一檔位都有擺着同樣的貨品。如紅瓜子、黑瓜子，各色各樣包裝的糖果，水果和塑膠花。小孩們乘機吵着買這種吃，買那種玩。有些少女好像是錯拿她們妹妹的裙子來穿，又短又窄，真不像樣。我真不明白她們是來辦年貨呢？還是來參加服裝展覽呢！（看她們的那樣穿法，可能是來「報窮」吧！）。而那些打扮得入時的男仕們，好像並非在辦年貨而是在「相人」。

走了一趟，我就不想再走了。因爲那裡很擠，在人群裡「活動」真不好受。只是走完這一條巷子，就浪費了差不多一個半鐘點了。再一回想，真可惜，寶貴的時間就這樣白白的浪費掉了。

談禁止吸煙 與國民健康

劉萬章

4M6



衆所週知，我們人類為了物質享受，往往會做出許多對我們自己本身不利的事情。雖然，現代的醫學很發達，但是，這世界上却還有許多病症是無法治好的，就拿癌症來說，到目前為止，並不能夠將它完全控制，甚至可以說是無藥可救，而造成癌症生長最主要的原因莫過於由吸煙而來。

我們姑且談談吸煙所造成的害處，吸煙除了可以造成癌症的生長外，還會影響到身體的健康，有些人說吸煙可以消愁解悶，甚至還可以刺激神經，其實這這是無稽之談，試問如果吸煙有這麼大的功用，那又怎麼會有迷幻藥的產生呢？反之，吸煙能使我們身體健康的組織受到破壞，早一點到地府去報到。居於上述幾種因由，那我們可以總括一句，吸煙是有弊而無利的。

我國政府目前就針對了這問題開會討論，經過了多次討論的結果，便宣佈在公共場所以及在戲院裡都不允許吸煙，這無疑是給一些烟蟲一個打擊，可是一個國家的組成主要是靠人民，一旦國內人民因某種原

因而造成一種嚴重的死亡率，這對於一個國家來說，是一個非常嚴重的問題。同時，一個國家之興盛繁榮與否，全視國民的健康而定，倘若國內人民三天病兩次，一年有兩個月在醫院休養，在生產事業方面說，無疑要受到打擊，就連國家的經濟也要因此而動搖。吸煙就可能造成這種情形。

我國政府之所以要實行這計劃，完全是為了國民的健康利益着想，同時，在一個新興的國家來講，須要的是能吃苦耐勞的人民，並非一些病夫，一些由吸煙而造成的病夫。此外，因禁止吸煙而使到人民一天少吸五根烟，那麼，一年將會少吸了五萬多根，而一根香烟以五分錢來計算，這又是一筆很可觀的數目。如果將這筆錢充作教育或醫藥基金，那麼將有多少蒙受其惠，所以政府實行這項禁限吸煙法令，可以說得上是一種明智的措施。

總得來說，禁限吸煙與國民健康有着很密切的關係，政府能實施這項禁令，實在是一種明智而有益人民的舉動。

With Best Compliments

of

OLD BOYS ASSOCIATION



被遺棄的人

4M5

羅俊的

夕陽消失了，一撤黑色的紗，代替了五彩繽紛的晚霞，永遠的，也許是一個循環不滅的定理……總是在這個時候，醜惡的夜，悄悄的把黑暗帶來人間……轉瞬間，夜變得更醜惡，黑暗……。

夜漸漸的深了，萬籟俱靜，沒有星斗，黯淡的月亮，被那單薄的雲紗遮蔽住了，透過了雲紗的一絲光綫，是那樣的微弱。冷風刺骨般的吹來，豎立在街道兩旁的幾盞路燈，更顯得個別的孤寂。長長的街道，沒有行人，也沒有車輛，只有那野狗的吠聲，劃破了夜的沉寂。在這個時候，有些人正在「金屋」中與妓女鬼混，酒、肉、女人，使這些醉生夢死的人墮落更加墮落……；有些人呢？現實使他們窮，或許他們正在與貧困做垂死的掙扎！儘管這樣，沒有人會想到就在這一個夜闌人靜的時候，這條寂靜的街道上，會出現一個老人，一個風燭殘年的老人。

他沒有家，也沒有親人——他唯一的兒子，因為是非公民而失業，又經不起現實的考驗而在數月前跳樓自殺。這殘酷的社會，使他的面容顯得憂郁而憔悴。現實奪去了他的希望，甚至恨所有的人。今夜，由於欠了屋主的三個月房租，他終於被趕出來了，那吃人的屋主，連他僅有的財產，也被沒收了。他沒有反抗，因為他是那麼老弱無力，他的反抗是起不了作用的。他已經走過了幾條街，現在，他還是慢慢的走着，沒有目的地的走。他，走到了這條街的盡頭，在街的盡頭，有三條路，他立在三條路的分叉處，他感到迷惘，惆悵。他在想……我究竟要走那條路呢？我又要向何處去？那些親戚，在我窮苦的時候已經與我疏遠了，如今，我要去找他們嗎？不，我絕不！過了一會兒，老人嘆了一口氣……又想……路我走得太多了，從我年輕的時候起，但是我都遭受到失敗，現在我還有選擇的餘地嗎？……想着……想着……忽然，他像發現了什麼東西，他向着一座大廈走近，這摩天大廈，是聳立在這個「花花城市」的中心，一切現實的罪惡，在它目光炯炯之下，發生了。可憐的老人慢慢的走近這座大廈，他望着這「巨人」，默默無語，最後他開口了……「噢！大廈，你這魔鬼，我無處棲身，連一間小房子都沒有，你呢？你却在這裡供給有錢人「享受」，你……你是有錢人的玩物吧了！你可曾想到，有人正在火熱水深中受苦，不，你永遠不會知道的……哈……哈……你這隻魔鬼，你立在這社會的市中心，你是否看到人間的醜惡，你可曾看到……。」大廈沒有應他，老人的話却在空間盤旋着……

……餘音未散。他笑了，笑得那麼淒苦。他走進了大廈，一層一層的往上走，腦子裡空洞洞，什麼都不想！他只知道他要離開這可惡的地方，到快樂的地方去。更上一層樓，死亡就更接近他，他的心顯得很平靜，他知道到了最高的一層時，他所要做的事。終於，他走近了死亡，踏上了最高的一層，他向下望，整個市區像死一般的寂靜，黑暗，他不相信，就在這個城市——社會裡竟有這麼多的罪惡發生……不停地……不知何時才會停止？他抬起頭來，望着黑夜的長空，嘆了一口氣，低聲的說道：「現實啊現實，殘酷的現實，你扼殺了我的兒子，如今你又迫我走這條路……。」說着，他似乎在遙望遠方，自言自語，音調是那麼悽慘：「孩兒，你寂寞嗎？父親來了，你等着我吧！讓我也離開這可詛咒的社會，到極樂世界去吧……。」他的意思，忽然變得激動，他想死，立刻死，因為社會已經拋棄了他，他對這個社會再也沒有什麼意思留戀了……他在與死亡掙扎，掙扎……最後他跳下去了……。

檳城紀遊

中三M三 潘祖勝

記得在去年的春季，我曾經來過這風景優美的島嶼，那就是檳榔嶼。

現在，我又乘着年假，再次的踏上這風景怡人的「東方花園」了。一來是為訪友，二來是這地方太吸引人了。

當我第一次來時，培儂會帶我遊遍島上的名勝，尤其是那升旗山的風景，更不能使我忘懷。

培儂，是我小時的隣居，當我剛踏入中學階段時，他便跟隨着家人到檳城去了。雖是相隔得那麼遙遠，但我們常常通訊。

坐了一整天的車，人也有點疲倦。下車時，他告訴我明天要帶我去玩，叫我今晚好好休息，養足精神。但是我懷着那興奮的心情，又怎能睡得着呢？

晨光從窗外透進來，我已醒了。一會兒，培儂進來叫我去吃早餐。早餐後我們就出發到「東方花園」去了。當我們抵達目的地時，只見那兒人山人海熱鬧極了。我們只好走馬看花的遊了一遍，然後再去升旗山。

下了纜車，我們覺得很口渴，於是就去餐室喝茶，我們在山頂足足玩了兩二小時。從山頂望下去，只見一片汪洋大海，海上有很大輪船，看去却像積木塊散在地上一樣。

玩了一整天，我們都還不覺得累，於是，再去看不一場電影。

光陰似箭，一星期過去了，我只得辭行。這次來檳探訪好友，真是一舉兩得。

談種族暴亂 與國家安全

李德志

「物競天擇，適者生存」人類以智慧的頭腦戰勝一切大自然，成為這大地的主人，然而却因不同的膚色、分居各處，任何一方面，都存着侵犯另一方面的企圖，正所謂一山容不得二虎，根本沒想到人類本是同根生的；何況這世紀的世界，物質的享受，道德的沉淪，已使人類自私的心理永遠沒有滿足的一天，屢想侵佔對方的利益，以滿足自己更高生存享受。

近世紀移民的結果，使到許多國家都變成多元種族的邦國，環顧四週，那一國能阻止種族暴亂的趨勢呢？有，則也只是靠了該執政者高明或獨裁的手腕處理下來吧了！但能担保沒有死灰復燃的一日嗎？有了如此大的內患，國家如何能強盛繁榮起來呢？種族間互相攻擊，人民沒有了安全的保障，這樣凌亂不堪的局面，國家安全便受到了嚴重的威脅；因此種族暴亂與國家的安全有着非常密切的關係。

舉如南非這個本是黑人的國家，却因白人的移民，使到國家的經濟動力都操縱在白人的手裡，而且少

數的白人既然獨裁地統治了多數的黑人，對於黑人視為被剝削的對象，這個種族主義的國家永受世人的斥責。又如，印尼、菲律賓以多數民族來迫害少數華族，他們都是因為懼怕華族掌握了經濟權；但他們雖奪到了經濟權力，國家經濟非但没有進展，而且反而給他們弄得一敗塗地，由此可看出盲目的種族主義只會攪到自己焦頭爛額。

譬如我國隣邦前年所發生的「五·一三」事件，便給我們帶來了很大的教訓，他國統治者雖然給了某族許多特權，然而他們却不會利用，反而嫉妬華族的生活，結果便發生了種族衝突事件，因此可見單給某一族特權，反而使他們有了依靠，而不去奮鬥，終於扼殺了經濟發展能力。

為了防止種族暴亂，最好的方法便是大公無私平等對待各種族，對於他們的語言、宗教隨其發展，這樣各種族才能心甘情願的安居樂業，國家的安全也有了保障，大家才會共同為國家的繁榮而建設。

談相處之道



符芳裕 3M9

在我們的生活中，時常會覺得與他人相處是一件難事。我們也會覺得有些人真令人討厭，使人不喜歡與他接近。如果我們有這種想法的話，便要「推己及人」想想自己是否也是令人討厭。

如果要和別人相處得來，那麼我們就不能計較別人的錯處和缺點。世界上有誰敢說他是完人呢？根本就沒有，既然如此，寬恕他人是應該的，這也是為人的一種品德。

往往朋友之間不免常會有些誤會，或有所爭執；如寬恕別人的錯處，容忍和謙讓，才可以使友誼永遠存在。要做到這一點是不容易的，我們應原諒他人的錯誤外，同時也要幫忙他人改過，使他向上善的方面發展。因此我們不能立刻對別人期望太高或苛求別人具備自己的長處，是我們應有的態度。

每個人都有不同的個性、興趣和習慣。我們認為有趣味的事，別人可能是討厭的。因此要避免發生衝突，就要互相容忍，互相謙讓。

有些人喜歡管別人所做的一切事，這樣的個性會帶來許多不必要的麻煩。因為某些事是屬於私事，管不着的，所以除非是對他人有益，不然就閒事少管。

輕視他人也會引起不良的後果。如老師不理睬他的學生，只因為學生家庭很窮，或學生因為對老師的不滿，而當老師在黑板上寫錯字時，便大聲叫喊以譏諷老師，這樣做法不但無補於事，反而使他人相對的對你產生反感，也就談不上和他人相處了。

如果我們要與人融洽相處，我們就應該尊重別人，保持應有的禮貌，寬恕別人。不然，雖然我們很有學問，但是，如果不懂得和別人相處之道，便無形中孤立自己，碰到困難時，也就無處求助了。



一個難忘的晚上

黃耀木

NG YOW BAK

夜已深了，街道上只有寥寥幾個行人，多數的人早已進入夢鄉，只有幾家住戶的窗口透出燈光。事情就發生在這個寂靜的晚上……

「小充，快去睡吧，明天早點起床，免得又要遲到學校！」

「是的，媽。媽，您也早點去睡啊。」

「不，你爸爸還沒回來，我要等他回來才睡。他一定又是爲了多賺點錢，去多載幾個搭客了。唉，我們一家三口，全靠你爸爸踏三輪車來維持生活，要是你爸爸有什麼三長兩短，叫我怎麼辦呢？」

小充是個聰明的孩子，看到母親這種憂愁的樣子，就會想到應該去安慰母親了。

「媽，我看是不會有什麼事，您安心去睡吧，讓我來等。」

「不，你應該早點去睡，我……」

就在這時候，一陣急促的敲門聲傳進母子倆的耳里「砰！砰！砰！」

「誰啊？」母親問。

「一定是爸爸回來了！」小充搶着說。他很快地跑去開門，他們母子倆同時被嚇了一跳，原來在敲門的並不是他們想像中的人，而是一名警員！

「請問這裡是不是陳X X的家？」

「是的，請問先生有何貴幹？」

母親心里焦急的問那名警員。

「請問你是……」

「我是他的妻子。」母親接着說。

「陳太太，我是來向你報告一個不幸的消息，你先生在一場車禍中喪身了，請你……」

這句話有如晴天霹靂，母親一時受的刺激太大，沒等話說完，就昏倒在地上。小充也禁不住心中的悲傷，大聲的哭起來，同時撲倒在母親的身上。

在旁的警員看到這情形，手忙腳亂的趕快把陳太太扶到椅子上，然後設法救醒她。

不久，母親慢慢的醒過來，那警員才鬆了一口氣。

「嗚嗚，我的天呀！」陳太太又有點支持不住。當警察先生交差完畢走后，母親心里很零亂，不知如何是好。屋里死一般的寂靜，只有母親隱隱約約的哭泣聲。小充站在一旁，不知所措。

就這樣，時間很快的溜過去了，在不遠的地方傳來一陣鷄啼聲，把呆思中的母親喚醒過來。

「媽，別再悲哀了，我可以輟學，然後去找點工作來維持家用。」

母親忽然嚴肅而堅決的說：「不，你決不可輟學，答應媽好好唸書，將來做個對社會有貢獻的人，我寧可去拿點衣服來洗、做些針紙，也不能讓你沒書唸！」

「媽……」小充感動得撲倒在母親的懷里，大哭起來。

「乖孩子，只要你肯努力讀書，媽多辛苦也要供你讀到大學。」母親慈祥的說。

小充仰頭看着母親，兩人相視一下，然後各把頭垂下。

從窗口透射進來的陽光或可照暖了母子倆的心房。



ADUHAI SUNGAI
Mumu
OLH: KOMARI TUBI
MEN. 4M2

"ADUHAI SUNGAI"

Muara-mu
aduhai, bagitu damai menchechah rasa
sa-laku mulut luas menganga
membuka selat sejarah
perlahan2 menelan mentari senja;

Aduhai, bagitu indah mata kaubelah
pada langit berapi merah
pada pulau sembilan beradek
remang beremas di-rembang petang.

Pinggir-mu
ah, samar telah pepohon kayu dan nipah
bagan nelayan dan tongkang2
menari2 di-ayer bermanek.

Lidah-mu,
menjulor merentas kota raja2 desa
berliku2 saperti sejarah-mu
menggelepar dan mengalir mengempas-pulas
bersama penghuni di-sapanjang pinggir-mu.

Aku bangga dengan keindahan-mu
aduhai sungai yang terchinta.

Komari Tubi
Sec. 4M1



SAJAK:

MENGAPA PERASA'AN ITU DATANG

Berkali-kali pergiatan-ku mengapus-nya.
Pemikiran Chandu mengerling juga.
Berhasrat besar tembok pencherai.
Membisu hati, nadi dan raga.
Chuma samar-samar kabut pencherai.

Di-muka ayer sa-jernih chermin.
Kekerohan selaput hilang penghening.
Musim2 datang bertakwa muka.
Ku ikut juga beriring2an.
Tapi, memuntah pemua di-pertengahan.

Perasa'an menggoda di-ambang harapan.
Petikan hati runtunan jiwa.
Tekanan menghilang kembali jua.
Rasa2 kiamat di-pertengahan.
Semayam takhta di-kabut hari.

Di-sana ada lautan luas.
Medan tempat perjuangan, saujana harap.
Di-sini hanya ijazah pengalaman tirus,

Penyair,
Ithnin Bin Abdul Jalil
Pre-U 1A (Sc./Tech.)
Q.S.T.S.

'SAINS'

Apa-kah sains? Sechra kasar, apabila disebut sains, kita terbayang maamal2 kajian dan alat2 yang pelek2 yang tidak di-pahami oleh orang2 kebanyakan. Ini ada-lah konsep yang salah, keliru dan mengechewakan pendengar yang ingin mengerti apa itu sains? Mengikut pendapat yang benar, sains di-istilah-kan sebagai 'kenyata'an2 yang tersusun, ada perkata'an di-antara satu kenyata'an dengan yang lain dan benar mengenai alam semesta. Kebanyakan dari kenyata'an2 ini adalah dapat di-rasai atau di-alami oleh kebanyakan orang atau di-bukti-kan kebenarannya sechra ilmu hisab ia-ini tioritikal sahaja, tetapi berdasarkan fikiran2 sains yang telah sedia ada.' Dari pengertian yang telah di-beri ini, jelas-lah yang kenyata'an2 mengenai alam semesta tanpa perkaitan di-antara satu dengan lain tidak-lah di-anggap sains. Mithal-nya ahli Alkimia (Alchemists) telah mengumpulkan beribu2 kenyata'an mengenai alam tetapi tanpa perkaitan di-antara-nya, seperti sifat2 kimia benda2 dan kejadian2-nya. Maka ini tidak di-anggap sains kerana tidak memenohi syarat2 sebagai sains.

Bahawa di-ingat, sains bukan-lah sa-takat ilmu pengetahuan sahaja tetapi ada-lah juga chara berfikir yang lengkap, dinamis dan suchi. Fikiran2 (ideas) sains ada-lah tidak di-pengarohi oleh sebarang sentimen ma'anusia yang serba kurang ini, seperti yang telah di-kata-kan, sains berdasarkan pemerhatian, sukatan dan perchoba'an yang di-simpulkan sebagai tiori dan hukum (Laws) tertentu. Kebenaran sains boleh di-bukti-kan oleh semua orang baik dari segi tiori maupun perekitikal. Sains juga tidak berdasarkan lojik akal maupun perasangka2 datok nenek dan kitab ugama. Mithal-nya, pada lojik akal semua benda jatuh ka-bumi dan kederasan (accelaration) yang berlainan bagi berlainan saiz benda2, tetapi ini tidak benar, sains menyatakan kederasan benda2 yang jatuh ka-bumi ada-lah sama tidak kira saiz-nya, sa-sudah memper-timbangkan kesan angin (air bouyancy).

Banyak lagi kenyata'an2 sains mengenai alam yang dapat kita alami tiap2 hari. Jadi sains bukan-lah ilmu yang di-punyai oleh sa-golongan ma'anusia yang di-gelar saintist tetapi sekadar kenyata'an2 mengenai alam, di-kumpulkan dan di-pelajari untok di-pahami. Satu pertanya'an timbul; mengapa kita pelajari sains? Jawapan-nya; ada beberapa sebab mutlak mengapa kita belajar ilmu sains. Dengan memahami kejadian2 alam, kita dapat menyesuaikan dengan keadaan sekeliling, dan

dengan itu kita tidak akan tertanya2 pertanya'an2 jika kita melihat kejadian2 semulajadi alam seperti; mengapa kejadian itu boleh berlaku? Ataupun, apakah di-sebalek kejadian2 itu? Dari sini, sains memainkan peranan yang amat penting dalam membajai norani ma'anusia dalam mengenali Tuhan-nya. Kerana, dengan memahami kejadian2 alam kita akan sampai kepada suatu ukuran dan fahaman yang terhad sahaja, tidak lebeh dari itu. Mithal-nya sasudah di-kaji sesuatu kejadian, ma'anusia tidak akan dapat sa-suatu kesimpulan tertentu 'kenapa kejadian itu berlaku', dari sini mereka akan merujuk kepada kuasa Tuhan-nya yang maha berkuasa itu, tuhan-lah yang menjadikan segala2-nya, ma'anusia (saintist) hanya men-erangkan bagaimana ia berlaku dan peroses2-nya.

Apabila kecherdasan akal fikiran dan minat ma'anusia bertambah mengenai sains; kejadian2 yang lebeh rumit dan sukar di-pahami dapat ma'anusia ikuti dan di-pelajari. Dari sini timbul-lah perkakas2 yang menolong memperhalusi pemerhatian dan chara ma'anusia menguji sa-suatu kenyata'an alam. Baik teropong pembesar mahu pun 'cyotron' ada-lah sebagai menolong ma'anusia sahaja tanpa sebab2 lain-nya.

Oleh kerana kenyata'an2 mengenai alam yang lebeh sukar dapat di-ketahui dan-di-ikuti maka sa-suatu fikiran yang akan di-ketahui itu hendak-lah di-nama-kan 'hipotesis', kerana ia belum di-ketahui kebenarannya. Sa-sudah di-jalan-kan penyelidekan2 yang mendalam (boleh jadi memakan masa yang lama, bertahun2) oleh saintist2, maka idea itu boleh-lah di-nama-kan Hukum (Law) apabila telah terbukti kebenarannya. Mithal-nya 'Hipotesis Avogadro's' yang telah di-terima sebagai 'hukum Avogadro's' itu.

Keperchaya'an saintist tentang perkaitan kejadian2 mengenai alam dan semua hukum2 (laws) ada-lah unggul (ideal) dan laku untok semua kejadian pada keadaan yang sama, maka ia boleh diterangkan dengan rumusan (formulae). Mengikut LORD KELVIN, di-sini saya terjemah-kan ucapan-nya, "Apabila awak dapat menyukat sa-suatu dengan angka (formulae) apa yang awak chakapkan; awak tahu kenyata'an itu. Tetapi jika awak tidak dapat menyukat (mengukur)-nya dengan angka, pengetahuan awak tentang kenyata'an itu ada-lah sedikit sahaja dan ada-lah sasuuat yang tidak memuaskan." Kenyata'an ini Kelvin merujuk-kan kepada perkara2 kejuruteraan, physics dan kimia (chemistry). Kenyata'an ini juga menekankan betapa mustahak-nya formulae dalam sains.

Sa-suatu kejadian pula mempunyai keterangan2 yang tertentu dan ini di-namakan tiori Sains (Scientific Theory). Di-sini-lah letak-nya kegunaan2 formulae.

Kebehasilan sa-suatu formula yang telah terasas sekian lama, akan terjamin kebenarannya hingga bila. Newton merumuskan formula bagi dasar terekan bumi (Principle of gravitation), ia bukan-lah menchipta formulae itu, tetapi menjumpai-nya (discovered) sahaja kebenarannya. Formula terekan di-antara benda2 juga telah dapat di-bukti-kan oleh Newton. Jadi, kebenaran tiori2 sains ada-lah terima'an umum untuk sebarang ketika dan keada'an tanpa di-ubah2.

Di-akhir2 ini, kajian2 mengenai alam semesta kelihatan begitu aneh sekali, kerana memasoki bahagian yang sangat ilmiah dan remeh. Kejadian yang kecil2 dan rumit2 seperti atom dan nuklear. Kejadian2 yang aneh ini menambahkan dalam-nya fahaman ma'anusia mengenai alam dan sebagai kesan-nya, orang kebanyakan, (bukan saintist) menganggap sains ada-lah berbedza dari ma'ana asal-nya. Jurang perbedza'an antara saintist dan orang kebanyakan semakin lebar, sebab-nya, mereka tidak memahami tiori2 sains modern yang sukar itu.

Kejayaan ilmu sains telah dapat menyumbangkan bakti-nya kepada masharakat ma'anusia. Berdasarkan ilmu sains ma'anusia boleh membuat

berbagai2 benda2 yang menolong memudahkan kal, lampu letrik, radio, TV, kertas, pen dan sebagainya. Di-sebalek-nya, ilmu sains juga boleh digunakan untuk tujuan2 kemusnahan seperti, bomb atom, haiderojan dan nuklear. Pada masa ini keraguan telah timbol tentang sains. Jika pada dasar permula'an-nya sains mengajak kita kepada kebaikan, kepada memahami alam semesta; tetapi sekarang telah bertukar kepada anchaman yang mengerikan.

bahan rujok:

- Principle of Physics
— by Nelkon.
- Inorganic & Physical Chemistry
— by Holderness.
- Approach to General Paper
— by E.W. Jesudasan.

penulis:

Ithnin Bin Abdul Jalil
Pre-U. 1A (Sc./Tech.)
Q.S.T.S.



AKIBAH PEPERANGAN

Dalam negeri2 yang tamadun, bila dua orang ada pertikaian yang ta'dapat di-selesaikan oleh mereka sendiri, maka mereka pergi ka-hadapan pengadil. Pengadil itu menyelesaikan parkara itu dengan aman. Bangsa2 yang tamadun telah menyelesaikan pertikaian2 dengan chara ini.

Peperangan maseh lagi di-sifatkan sa-bagai sahaja jalan untuk menyelesaikan pertikaian2 di-antara bangsa2 dan untuk menjaga keamanan dalam dunia. Sa-sunggoh-nya ini ia-lah fahaman yang silap. Peperangan maseh lagi suatu kenangan kedzaliman dalam zaman 'nuklear' ini. Tiap2 tahun sains moden menchipta lagi senjata2 yang bertambah kuat untuk membinasakan jiwa dan harta benda. Tidak shak lagi bahwa perasaan timbang rasa dan persefahaman telah mengurangkan kedashatan peperangan. Pada zaman dahulu orang2 bangsa Assyrian menyula orang2 tawanan dan orang2 bangsa Greek dan Roman menjadikan mereka itu hamba abdi yang di-ta'alok. Pada zaman itu perbuatan menggantung, membelah, memenjara dan menghamba-abdikan orang ia-lah perkara biasa.

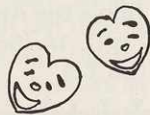
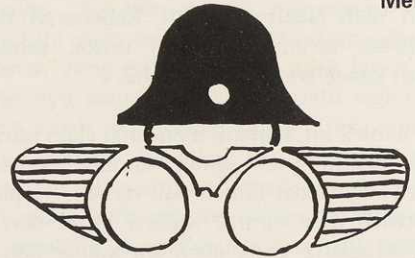
Kedzaliman sa-umpama itu tidak boleh berlaku dalam masa peperangan di-antara bangsa2 yang tamadun pada zaman ini. Beberapa perchubaan telah di-lakukan baharu2 ini untuk mengurangkan kedashatan2 peperangan ini dengan jalan mengadakan perjanjian2 antara bangsa2. Persatuan Bangsa2 Bersatu berdiri sa-bagai benteng yang kokoh bagi keamanan dunia. Sekarang pada masa peperangan ada-lah di-itirafkan bahawa harta benda hendak-lah di-hormati dan kelasi2 yang luka dan doktor2 yang mengubati mereka tidak boleh di-tembak. Tetapi walau pun ada segala syarat2 saperti ini, dan sa-lagi ada bahaya peperangan, maka sudah tentu ada banyak kejahatan yang di-lakukan. Apabila peperangan berlaku, maka sudah tentu huru-hara bermaharajalela di-tempat2 yang berhampiran. Puak2 penjahat tentu akan merompak dan menyamum dengan bebas-nya dalam negeri itu.

Selalu peperangan itu melumpuhkan perusahaan sa-sa-buah negeri. Peperangan menarek semua orang yang sihat dari bendang2 dan kilang2.

Meriam2 besar membinasakan dalam tempoh beberapa jam sahaja bangunan2 yang telah mengambil masa bertahun2 membena-nya. Dalam tiap2 peperangan ramai keluarga yang porak-peranda di-sebabkan kehilangan harta benda dan saudara-mara mereka. Orang2 muda juga di-paksa berkhidmat dalam tentera. Peperangan menyebabkan kerosakan yang besar. Sa-bilangan kecil orang2 telah memashhorkan peperangan dan mereka sendiri telah masok jadi ahli tentera. Tidak ada seorang pun memasoki peperangan dengan redza hati-nya dan mati di-padang peperangan. Dengan mengetahui akan hal ini maka tentu-lah dapat dipadankan perasaan kebangsaan yang berkubar2 untok memenangi peperangan. Perasaan saperti

itu telah menyebabkan banyak tumpah darah dalam zaman lalu. Mengikut keadaan ketegangan dunia pada masa ini, peperangan akan berma'ana menghapuskan ma'anusia dari murka bumi ini.

Zulkifli Ali
Men. 4D.



HA! HA! HA!
HO! HO! HO!
HEE! HEE! HEE!

GELI HATI

—TERKENA—

Sa-orang nenek tua telah menaiki keretapi di-sa-buah steshen. Itu-lah kali pertama-nya dia mengalanmi naik keretapi. Memang pada biasa bila keretapi mula bergerak berbunyi lah suara, "His..... his.....his....." Mendengarkan bunyi bergitu, perempuan itu pun berteriak, "Allah, nak kan lekas jadi lambat. Apa punya nasib-lah, lalu nak turun dari keretapi itu. Sa-orang perempuan lain yang duduk di-sa-belah bertanya. . . . "Kenapa mak?" perempuan itu menjawab dengan ayer muka yang sedeh. . . . Awak tak perasan kah? Tayar keretapi ini dah pechah." Semua penumpang tertawa. Orang tua itu terchenggang kehairanan.

Pesanan Ibu Ali

Sa-telah bersharah dengan panjang lebar mengenai shorga dan neraka dalam pelajaran uga-ma, sa-orang guru telah bertanyakan murid2-nya, "Siapa di-antara kamu yang suka pergi ka-shorga angkat tangan?" Semua murid2 tergesa2men angkat tangan, kechual si-Ali, yang diam terkebil2 mata-nya. Melihatkan keadaan si-Ali itu che'gu pun bertanya kapada-nya, "Kenapa kau tak ingin pergi ka-shorga Ali?" Ali bangun menjawab, "Sebab pagi tadi mak saya pesan kalau sudah habis belajar di-sekolah nanti jangan pergi ka-mana2!"

Sa-orang suami yang sedang sakit tenat, di-hadapi oleh isteri-nya, berkata, "Som, sebelum abang meninggal dunia abang nak berpesan dan minta. . . ." isteri-nya, Som segera memotong chakap-nya lalu berkata dengan berchuchoran ayer mata-nya. "Ta bang, Som pun minta ma'af dan ampun pada abang sebab saya-lah yang beri abang rachun hingga abang mengidap penyakit maut ini." "Suami-nya terkejut dan berkata, kalau begitu, tak payah-lah aku berpesan lagi."

GURU: "Ali, tau-kah awak, apa-kah hasil utama negeri Cuba?"

ALI: "Saya tak tau che'gu. . . ."

GURU: "Bodah! Dari mana mak awak dapat gula?"

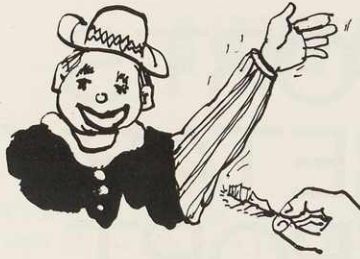
ALI: "Dia pinjam dari jiran2 yang tinggal dekat rumah saya che'gu!"

GURU: "Garu kepala tampa kata!"

PANTUN BUDI BAHASA

- (a) Embun di-panas tidak menanti;
jadi dahaga di-padang terang,
Biar pun emas penoh di-peti
Budi juga di-pandang orang,
- (b) Chelup emas belum menjadi,
chelup bertuku' hendak ka-bawah,
Hidup di-dunia tidak berbudi;
bagi pokok tidak berubah,
- (c) Ayer di-lubok warna-nya pirang,
mandi di-tasek tengah hari,
Biar burok bangsa pun kurang,
budi baik orang na'chari,

Md. Amin Mohd.
Men. 3M4



JENAKA RAMA

- GURU: Osman, apa erti-nya 'Ayah' 'Ibu' dan 'Anak'?
- OSMAN: Saya ta' tahu Che'gu.
- GURU: Astagafirullah. Kalau begitu tanya ayah kau malam nanti ya!
- OSMAN: (Di-rumah) Ayah, apa erti-nya 'Ayah' 'Ibu' dan 'Anak'?
- AYAH: Saya ayah kau, isteri saya ibu kau, dan kau anak ku.
- GURU: (Di-sekolah) Sudah kah kau tahu sekarang Osman?
- OSMAN: Ya. Ya Che'gu. Saya ayah kau, isteri ku ibu kau, dan kau anak ku.
- GURU: ?????
- KAWAN2: Tertawa Terbahak-bahak.
-

- TUAN HAKIM: Awak di-tudoh menchuri ayam Pak Leman Lima hari yang lalu. Awak mengaku salah atau tidak?
- PENCHURI: Saya ta' mengaku salah.
- TUAN HAKIM: (Sambil marah) Awak ada saksi.
- PENCHURI: Tuan fikir saya pergi menchuri malam itu, na'bawa saksi kah!
- TUAN HAKIM: ?????



Bakar ia-lah sa-orang 'BODYGUARD' kepada Tuan Kadir. Pada satu hari Bakar pergi bersama-sama Tuan Kadir membeli belah-di-bandar. Dengan ta'semena-mena sa-orang yang tidak di-kenali telah memukul kepala Tuan Kadir. Sa-telah semboh, Bakar di-tanya oleh Tuan Kadir dengan muka yang marah.

- TUAN KADIR: He! Bakar mengapa kau ta'tangkap orang yang memukul aku di-bandar tu semalam?
- BAKAR: (Dengan tenang ia-berkata) Bukan kah Tuan memberi saya tugas menjaga 'BODY' sahaja, bukan-nya kepala Tuan.
- TUAN KADIR: Ya, ta'ya juga !!!

Razili Bin Omar
Men: 4D





SPORTS SECRETARY'S REPORT

I am happy to report that there has been a slight improvement in the field of sports. Now that sports is an essential part of E.C.A. we hope that through wider participation we would be able to field stronger teams in the various games.

It is very encouraging to know that pupils from the Pre-University One class have assured me that they are prepared to give their whole-hearted support. I appeal to the boys who will be leaving us to come back and help the Games Masters in coaching the players.

Here are some of the achievements for the year 1970.

1. Senior Soccer Team Pasir Panjang District Champions (Represented P.P. District at the National Soccer Championships)
2. Senior Softball Team Pasir Panjang District Champions (Represented P.P. District at the National Softball Championships)
3. Senior Hockey Team Runner-Up in Pasir Panjang Six-A-Side Hockey Tournament. (Represented P.P. District at the National Six-A-Side Hockey Tournament)
Runner-Up in Pasir Panjang District 11-A-Side Hockey Tournament. (Represented P.P. District at the National 11-A-Side Hockey Tournament)
4. Junior Soccer Team Third in Pasir Panjang District Soccer Tournament. (Represented P.P. District at the National Soccer Championships)
5. Junior Hockey Team Third in Pasir Panjang District 6-A-Side Hockey Tournament. (Represented P.P. District at the National 6-A-Side Hockey Tournament).
Third in Pasir Panjang District 11-A-Side Hockey Tournament.

I am very proud of the boys who have brought glory to our school. I take this opportunity to express my sincere thanks to all games masters for their co-operation.

If the boys continue to train hard I am sure that we can do even better in 1971. I am confident that you, the pupils, will not let the school down. Let us all work together for the better of Sports in Queens-town Tech.

SEET CHIM TECK
SPORTS SECRETARY

ATHLETICS

This year's athletic activities started with a road-relay in early January. Road-relay practices began very early in view of the 5th Inter-Team Road Relay League Competition. Two teams represented the school and the A team was consistent in all the five districts' relay with its best effort of 29th position out of 150 teams at Bukit Timah. The following boys were regular runners in the team:

- | | |
|----------------------|------------------|
| 1. Leong Chun Cheong | 4. Mak Peng Weng |
| 2. Tan Aik Chuan | 5. Kananegi |
| 3. Tong Kwong Chuen | 6. Hue Yue Leong |

In the annual Cross-Country Race at MacRitchie on 22.1.70, Tong Kwong Chuen emerged winner in the Senior and Leong Chun Cheong in the Junior.

18 boys represented the School in the Pasir Panjang District X-Country and Tong Kwong Chuen, Tan Aik Chuan (Senior) and Leong Chun Cheong, Mak Peng Weng (Junior) were selected to represent the district in the National X-Country Championship.

The School's 14th Annual Athletic Meet was held on the 8th May. Records were not expected on a very muddy field after heavy rain. Only 3 records were broken as compared to 11 last year. Lui Ai Suan was the 'A' Division champion and T. Sivasdas the 'B' Division champion.

36 athletes (15 in 'A' and 21 in 'B') participated in the 11th Pasir Panjang Athletic Championships. In spite of the fact that we were the only school without "C" athletes (and incidentally the 'C' boys always put up the best effort) we were placed 6th in the overall results. The "B" Division athletes took 3rd place. Chee Hoong Onn, the Athletic Captain Lim Beng Khoon and Sivasdas won their event while runners-up in their individual event were Razali Omar, Ho Fang Yee, R. Loh, Wong Cher Chuang and again Chee Hoong Onn. The following 14 athletes were selected to represent the District in the 11th Annual National Athletic Championships:

Chee Hoong Onn (A)	Discus, Javelin, Shot Putt.
Ho Fang Yee (A)	Long Jump.
Tong Kwong Chuen (A)	2000 M Steeplechase.
Lim Beng Khoon (A)	High Jump.
Chan Soon Yee (A)	Discus.
Wong Cher Chuang	400 M., 4 X 400 Relay.
T. Sivasdas	High Jump, 400 M., Pole Vault, 4 X 400 Relay.
Richard Loh and Koh Ah Kang	Javelin.
Leong Chun Cheong	800 M., 1,500 M.
Razali Omar	High Jump, Pole Vault.
Namal Singh, Amar Singh, M. Shah	4 X 400 Relay.

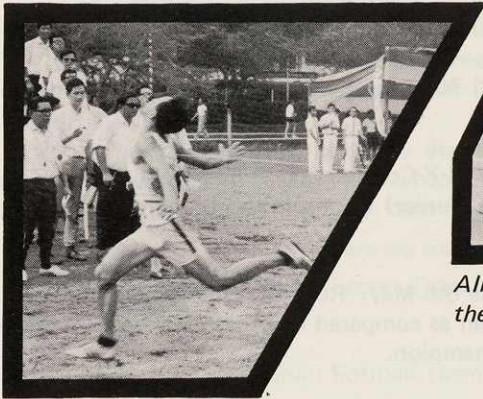
Chee Hoong Onn (Shot Putt), Lim Beng Khoon (High Jump) and the 4 X 400 Relay team reached the final and Chee Hoong Onn was selected to represent the Combined Schools at Ipoh.

I believe that of the athletes from the higher classes discard their rather indifferent attitude towards participation and more helpers can be found in the field the School should fare better in this branch of sports.

Oh Aye Lip
Athletic Master



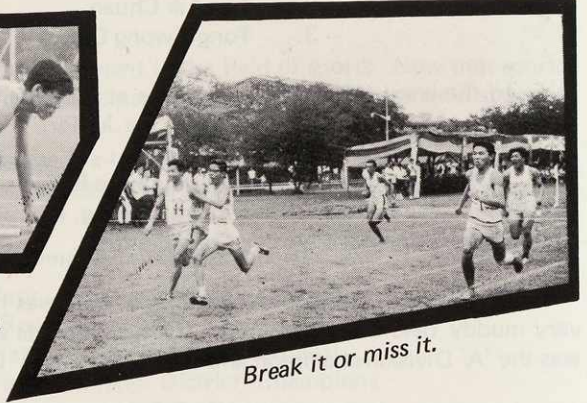
14th ANNUAL ATHLETIC MEET



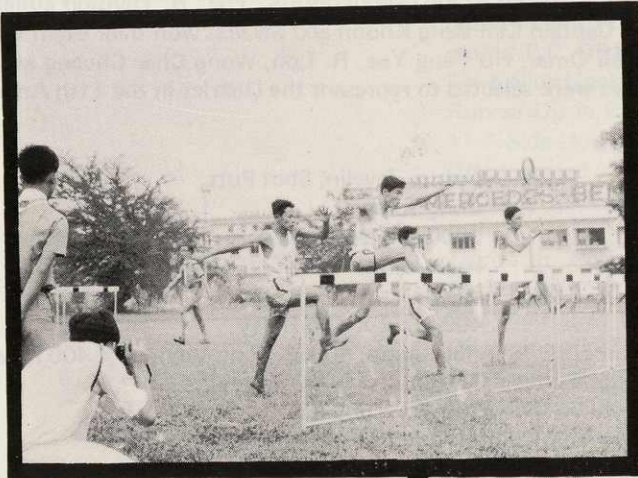
*Just a little
bit more.*



*All set for
the big bang.*



Break it or miss it.



*It might help if you
flap your arms more.*



*Is it for real, or is he
doing it with wires.*



Mine looks most impressive.



Golfkey



You're on Candid Camera!



Unarmed combat in mid-air.



Don't feel so bad.



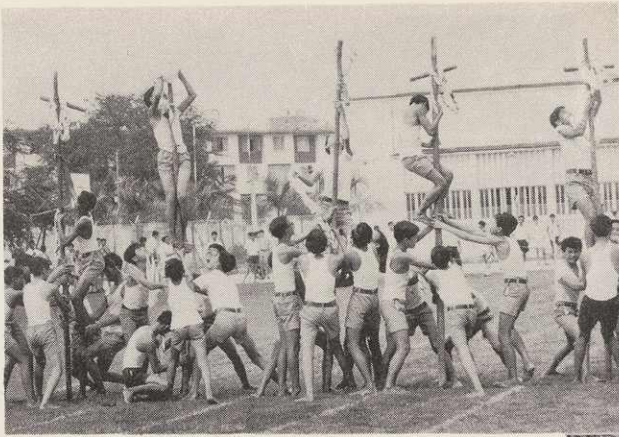
The black and white minstrel show.

It must be my birthday.



Well, that's one way to fly.





Volunteers for crucifixion?



A hole in one.

Heave! ho!



*One small step for a man
but a great leap for mankind.*



Rich food leads to diabetes.



*A thing of beauty
is a joy forever.*

annual cross c'try race



Crossing the country?



So you really want it ERH!



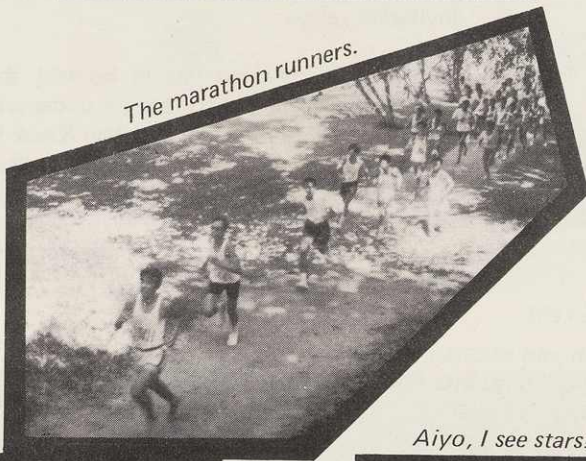
Big Walk?

Arsh, Disgusting!



I'll make it this time!

At last!!



The marathon runners.



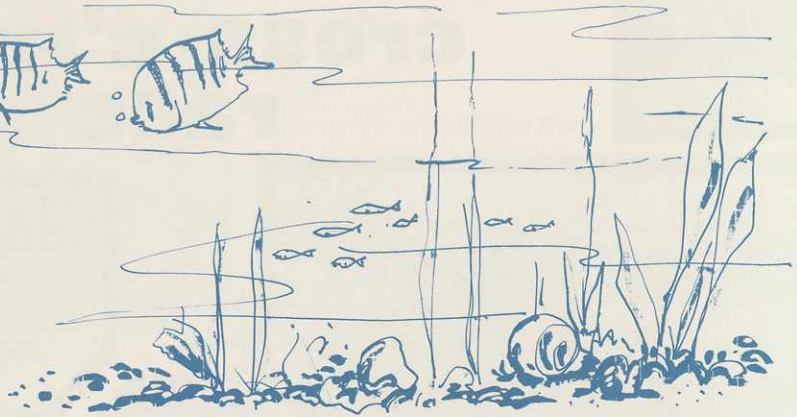
Fragile, and you are still on it?

Aiyo, I see stars!!



13TH ANNUAL

S W I M M I N G CARNIVAL



Our school's pupils have their regular practices at the River Valley Swimming Pool every Friday from 8.30 to 10.30 a.m. for the afternoon students and 3.45 to 5.30 p.m. for the morning students. The pupil's response have been very encouraging and they put in many hardworks during the practices hoping to set records in the forth-coming Swimming Carnival.

We are proud to say that at the 12th Annual Swimming Carnival, nine new records were set. Leong Yew Cheong was the outstanding swimmer on that day who held majority of the records.

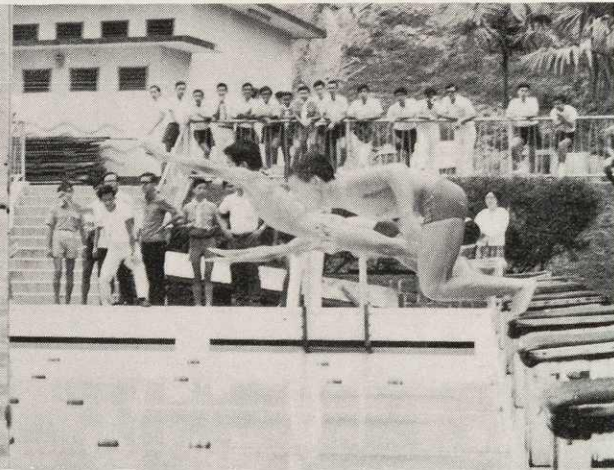
The School's Relay Team has been very successful in most of the invitation relays.

Special mention has to be said about two of our outstanding swimmers, Leong Yew Cheong is undergoing training for the Combined School's Water-pole Team and Wan Kwok Hoe was selected to represent the Pasir Panjang District last year at the National Swimming Championship.

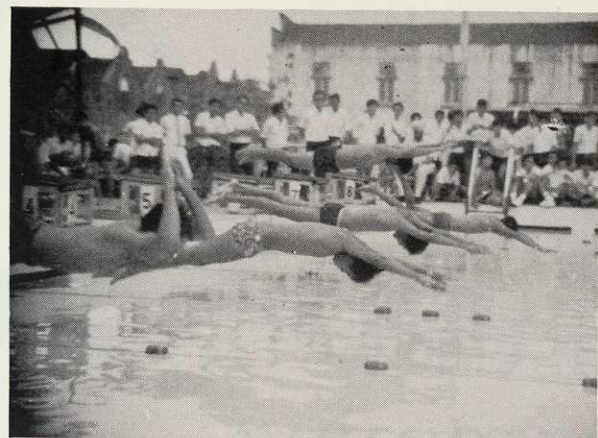
We hope to do well in the forthcoming Pasir Panjang District Swimming Carnival.



Look! A drowning man.



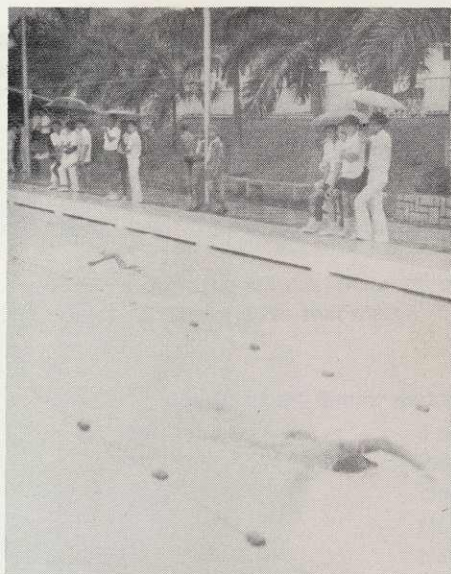
That's not the way to fly.



Ever seen a 'leaping sal-men'.



A flying start.



*It's a fish. It's a submarine.
No! It's Superman.*



Lo! A Butterfly.



His hobby — collecting prizes.

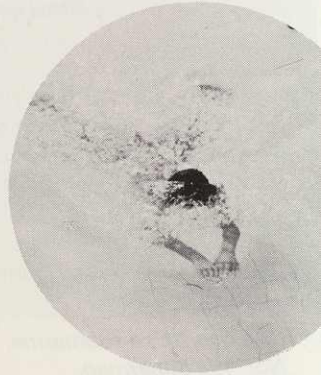
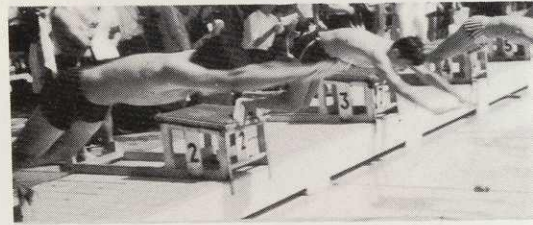
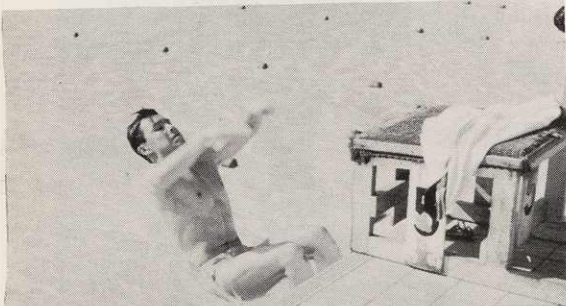
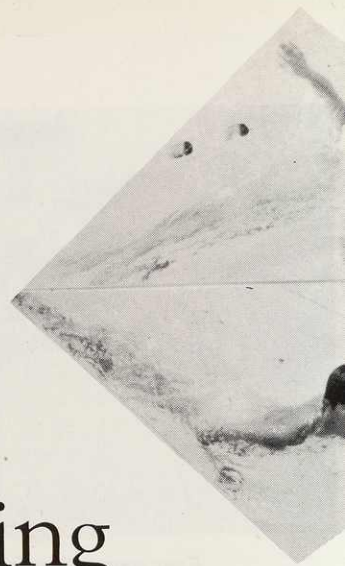
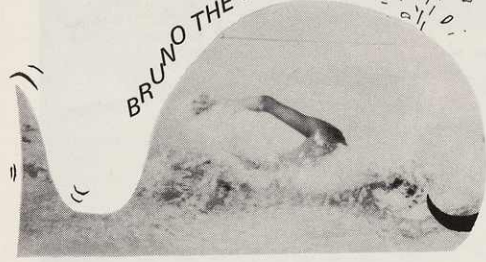
*What's a man like him doing in a place
like this? Unless, of course*



With

annual
pasir
panjang
district
swimming
meet

BRUNO THE WHALE



Q.S.T.S.
The District
CHAMPIONS



SOCCER

SOCCER



Soccer Masters : Mr. Foo Tah
Mr. Kenneth Pereira
Senior Soccer Capt. : Zahari
Junior Soccer Capt. : Zainuddin

The Senior and Junior teams put up excellent performances in the Pasir Panjang District Tournament. The seniors won the District Championship and the juniors finished third in their respective tournaments.

Our Senior team were unfortunate as they narrowly failed to qualify for the Quarter Finals of the National (7-A-Side) Soccer competition.

During the seasonal matches, our player did extremely well in both their training practices and tournament matches and for that matter, I must say that they are worthy of being Champions.

Results of the Senior matches:

Q.S.T.S.	vs	Tanglin Sec. Tech. Sch.	Won	8 - 0
"	"	Pasir Panjang Sec. Sch.	Won	1 - 0
"	"	Umar Pulavar Tamil High Sch.	Won	5 - 1
"	"	Gan Eng Seng Sec. Sch.	Won	3 - 1
"	"	New Town Sec. Sch.	Won	7 - 2
"	"	Queensway Sec. Sch. (Semi-Final)	Won	2 - 0
"	"	Yusof Ishak Sec. Sch. (Final)	Won	1 - 0

In the National Soccer Championship, the Seniors lost three matches and drew one.

Results of the Junior Matches:

Q.S.T.S.	vs	Yusof Ishak Sec. Sch.	Lost	8 - 0
"	"	Bourne Sch.	Lost	12 - 1
"	"	New Town Sec. Sch.	Won	4 - 0
"	"	Bukit Merah Sec. Sch.	Won	2 - 1
"	"	Gan Eng Seng Sec. Sch.	Won	2 - 0
"	"	Queensway Sec. Sch.	Won	2 - 1
"	"	Kim Seng Tech. Sch.	Lost	2 - 1
"	"	Tanglin Sec. Tech. Sch.	Won	2 - 1



Lian Ai Hian
Vice Captain.



You want to be rough eh!!!



Football Ballet

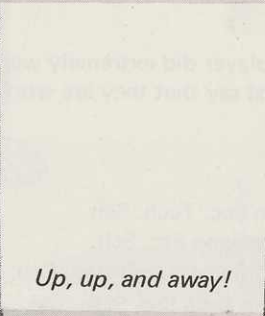


*The school teams?
Whooh.*

World Cup?



That's the Cha-Cha



Up, up, and away!



*Wish my arms
were longer*



Where is the ball?





HOCKEY



Teacher-in-charge Mr. Tan Hock San

Training was conducted in early January for both the Senior and Junior Hockey teams in preparation for the Hockey Tournaments in February. The weekly training paid off well. The Senior team was runners-up in the District 6-a-side tournament, while the Junior team managed to clinch the third place.

Results of the Senior 6-a-side Tournament

Queenstown	versus	Outram School	Won	0-0
Queenstown	versus	Bourne School	Drew	0-0
Queenstown	versus	Queensway	Won	1-0

Semi-finals: Queenstown beat Yusof Ishak 1-0

Final: The Seniors lost to G.E.S.S. by a short corner.

The Senior was also the runners-up in the district 11-a-side tournament. The Juniors reached the semi-finals in the district 11-a-side tournament.

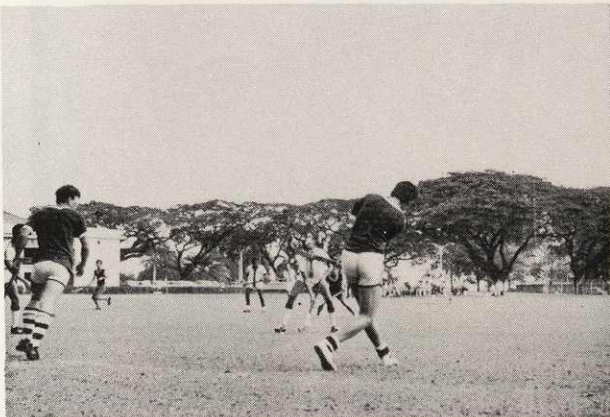
Results of the Senior 11-a-side Tournament

Queenstown	versus	Outram School	Won	1-0
Queenstown	versus	Queensway	Won	3-1
Queenstown	versus	Newtown School	Won	5-0
Queenstown	versus	G.E.S.S.	Lost	0-2

The Seniors however were not so successful in the National School Championship.

We would like to thank the Hockey-Master Mr. Tan Hock San and Mr. Seet for their heartwarming encouragement in these tournaments.

Lim Dau Kiaw
(Hockey Captain)



BADMINTON



Teacher-in-charge : Mr. Chang Kok Hong
Captain : Eng Yong Huat

As usual, the Pasir Panjang District Badminton Championship started in late January. The performances by the Junior team were encouraging. They managed to secure third place in the District Championship. However, the Senior team fair satisfactorily and were placed third in Group 2.

The School Open Singles and Doubles Championships were held during the first term followed by the Inter-House Tournament which was held after the mid-year examination.

On behalf of the players, I would like to thank the teacher-in-charge for his invaluable assistance and guidance.

Results of the Pasir Panjang District Badminton Championship

Senior Team:	Q.S.T.S.	vs New Town Secondary School	—	Won 3-2
	"	vs Umar Palavar	—	Walkover
	"	vs Tanglin Secondary Tech. School	—	Lost 0-5
	"	vs Gan Eng Seng School	—	Won 5-0
	"	vs Bukit Merah Secondary School	—	Walkover
	"	vs Queensway Secondary School	—	Lost 0-5
Junior Team:	Q.S.T.S.	vs Gan Eng Seng School	—	Won 5-0
	"	vs Tanglin Secondary Tech. School	—	Won 3-2
	"	vs Hua Yi Chinese Middle School	—	Won 4-1
	"	vs New Town Secondary School	—	Lost 0-5
	"	vs Pasir Panjang Secondary School	—	Lost 2-3
Junior Team: (Final)	Q.S.T.S.	vs Queensway Secondary School	—	Lost 2-3
	"	vs New Town Secondary School	—	Lost 1-4

Results of the School Open Badminton Championship 1970

Boys Singles :	Champion :	Eng Yong Huat
	Runner-up :	G.E. Ravanan
Boys Doubles :	Champion :	Sum Kwok Cheong & Eng Yong Huat
	Runner-up :	Ho Fang Yee & Heng Swee Huat

Results of the Inter-House Badminton Tournament 1970

Champion :	White House
Runner-up :	Blue House

basket



Teachers-in-Charge : Mr. Lee Han Peng
 Mr. Tan Cheng Pok
 Captain : Seah Eng Chiang
 Vice-Captain : Wong Wen Bin

This year the basketball season began in early second term. The Inter-House League Championship was held after the District Basketball Tournament. Our Senior team was eliminated during the heats owing to lack of training. However, we managed to beat two schools out of six.

The Junior Team was very successful in the heats in that they beat all the schools except Tuan Mong High School.

In the finals, they faced strong oppositions and emerged fifth by beating Yusof Ishak Secondary School.

Results of the Pasir Panjang District Championships:-

Senior Section:

Q.S.T.S.	vs	Tanglin Sec. Tech. School	Lost
"	"	New Town Sec. School	Won
"	"	St. Theresa's Sino Chinese Sch.	Lost
"	"	Tuan Mong High School	Lost
"	"	Pasir Panjang Sec. School	Won
"	"	Hua Yi Govt. Chinese School	Lost

Junior Section:

(Heats)

Q.S.T.S.	vs	Queensway Sec. School	Won
"	"	Tuan Mong High School	Lost
"	"	Buona Vista Sec. School	Won
"	"	Hua Yi Govt. Chinese School	Won

Finals:

Q.S.T.S.	vs	River Valley Govt. Chinese Middle School	Lost
"	"	Kim Seng Secondary School	Lost
"	"	St. Theresa's Sino School	Lost
"	"	Yusof Ishak Sec. School	Won

Finally, on behalf of the school team, I would like to thank the teachers-in-charge for their constant encouragement and assistance.





RUGBY



Teachers-in-charge:- Mr. Alfred Loh
 Mr. Lee Tik Soo
 Captain:- Tan Siew Tong

Training started fairly late this year with 2nd Lieutenant Richard Yeo who was kind enough to coach our boys. At the beginning the response was very encouraging, but finally only 18 players were left. In May, we send 2 teams for the 7-a-side tournament in the Senior Division and Junior Division. The first team managed to beat Upper Serangoon before losing to National Junior College. The 2nd team met Raffles "B" and lost the game.

Immediately after the mid-term examinations, the Senior and Junior 15-a-side teams were formed. Through lack of time, only one friendly match was organised for the Junior team. Our lack of match practice seemed to be the reason for our poor performance.

In the National Rugby Championship, we lost 4 matches and won one. Therefore, next year, with the junior players, who are shaping up very well, together with some of the senior players, who will still be in school next year, we hope to do better.

Finally, the team would like to thank Mr. Richard Yeo for his invaluable assistance.

Captain.

A sailor ran up to the officer of the deck and mumbled something in his ear. The officer yelled at him: "Sing it out, man! Sing it out!"

The sailor took a deep breath and sang:
 "Should old acquaintance be forgot
 And never brought to mind?
 The captain's fallen overboard;
 He's half a mile behind!"





VOLLEY BALL

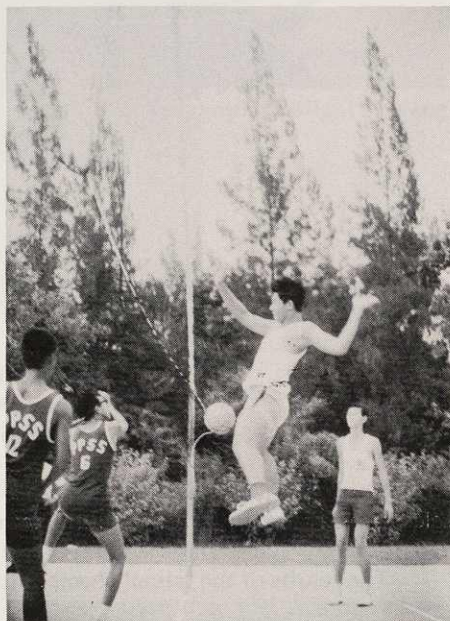


Teachers-in-Charge : Mr. Leong See Hoy
Mr. Lim Soy Soy



Both our school's Junior and Senior teams were very disappointed this year in the District Tournament held in Hua Yi Government Chinese Middle School. The senior team was eliminated in the semi-final when they lost to Tiong Bahru Secondary School. Players did not take advantage of smashing and passing though there were very intelligent tricks to trap the opponents. The Junior emerged fourth during the final. Their skills were above average and the teamwork was satisfactory.

On the overall the major failure was lacked of character training such as cultivating discipline, team spirit, obedience, ruggedness and so on. Its failure should make us realised to make a greater effort and aim at greater achievements in the near future among our players.



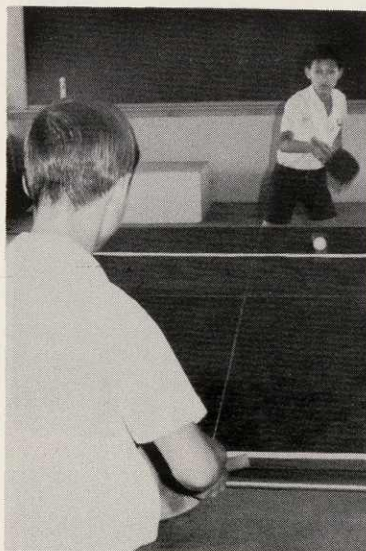


TABLE TENNIS



Teacher-in-charge:- Mr. Toh Kim Kang
Captain:- Tan Buck Soon
Vice-Captain:- Teo Hak Kwong

This year table tennis is seasoned in the second term. Various championship events are played to select prospective boys for the school team.

The results of the school championship are as follows:-

Individual Championship (Seniors)

Champion:- Lum Pak Meng
Runner-up:- Tan Buck Soon

Individual Championship (Juniors)

Champion:- Tan Chuan Poh
Runner-up:- E Peng Sim

In the Pasir Panjang District Championship, our team faired well in the preliminary round. Without much struggle, our school was one of the two schools out of six in the group, entered the final.

Our boys played their best, but the other finalist proved much better and we were placed sixth in the District Championship.

In the District Junior Individual Championship, our boys have played quite well. One boy was third in his group while the other two were second in theirs. But unfortunately, they failed to qualify for the final. In the senior section, our boys were less successful. All the three were third in their groups.

Finally, we like to thank the teacher-in-charge, Mr. Toh Kim Kang for his advice on our improvements.

Captain



softball



Teachers-in-Charge : Mr. Lee Juan Kow
Mr. Wong Soon San

During the first week of January, we started our training with enthusiasm. Training sessions were conducted twice a week. As we were determined to be the district champion, training was done in earnest. The hard work paid off and our senior team measured up to our expectation in becoming the Pasir Panjang district champion. The results of the games played were as follows:

Q.S.T.S.	vs	Pasir Panjang Secondary School	Won
"	"	Tanglin Technical Secondary School	Won
"	"	Outram Secondary School	Won

As the champion, we represented our district in the Combined Schools National Softball Championship. The results of the games played were as follows:

Q.S.T.S.	vs	Dunman Govt. Chinese Middle School	Won
"	"	Sang Nila Utama	Won
"	"	Boys Town	Lost
"	"	Raffles Institution	Lost

Having lost two games, we failed to qualify for the final of the National Championship.

The Junior boys were less fortunate. Although they did their very best, they lost two out of six games played and were failed to qualify the finals. The results of the games played as follows:

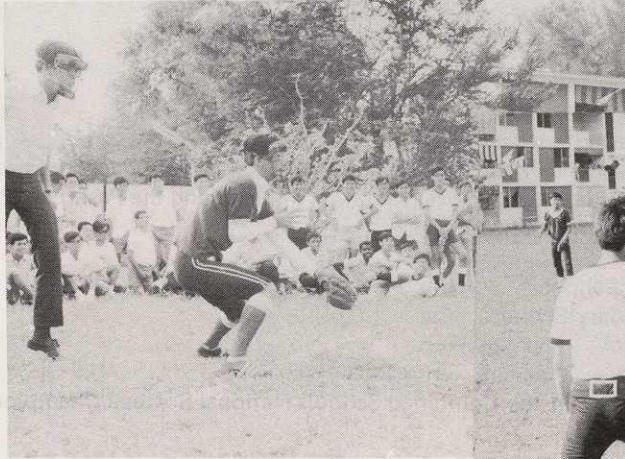
Q.S.T.S.	vs	Outram Secondary School	Won
"	"	Pasir Panjang Secondary School	Won
"	"	Tanglin Technical Secondary School	Won
"	"	Kim Seng Secondary School	Lost
"	"	Newtown Secondary School	Lost
"	"	Tiong Bahru Secondary School	Won

Finally on behalf of my team mates, I would like to express our heart-felt gratitude to our supporters, who had turn up, rain or shine, to give us their support; to cheer and encourage us throughout the season. Last but not least, I would like also to thank the softball teacher-in-charge for their kind support and coaching during the training sessions as well as the tournament.

Vice-Captain
Softball Senior
Koh Thian Seng 4E2.



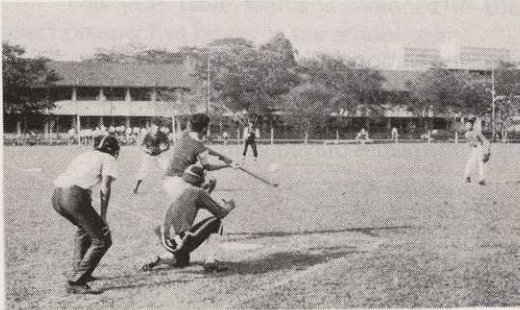
The School Team.



Oops! miss it ...



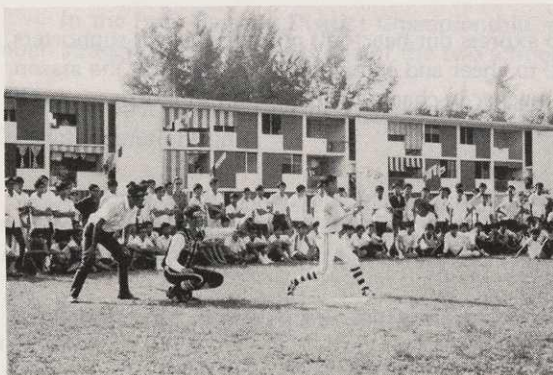
Kill that worm on the "pillow" base.



S.....t.....r.....i.....k.....e.....!



Sock it to me!

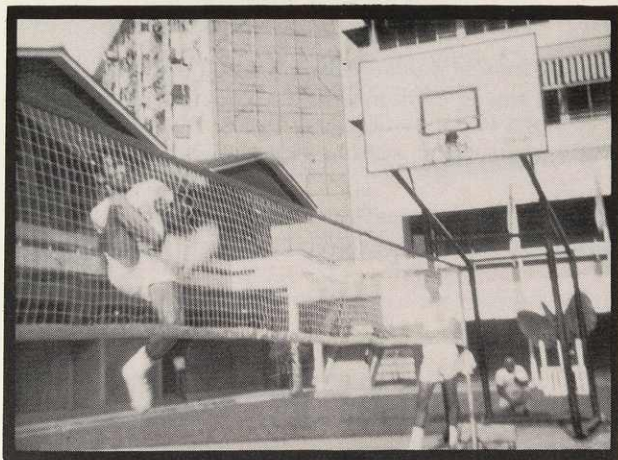


Crowded? Where shall I hit???



Bersilat.

SEPAK TAKRAW



Teachers-in-Charge : Mr. Salleh Salim
 Captain : Rafeae Johari
 Vice-Captain : Zulkifli Ali

Permainan Sepak takraw ini telah di-mulakan pada awal Penggal pertama. Latihan2 telah di-jalankan pada tiap2 hari Isnin dan Jumaat dari Jam 2 hingga 5 petang di-dewan sekolah, juga kami mengadakan perlawanan persahabatan dengan pasukan2 luar untuk menambahakan pengalaman dalam hal permainan tersebut. Sa-ramai tiga puluh pemain telah menjalani latihan itu, sa-telah di-tapis hanya tinggal kira2 lima belas orang pemain sahaja, untuk mewakili sekolah bagi kejohanan daerah Pasir Panjang yang akan di-mulakan pada pertengahan bulan Ogos.

Di-dalam kejohanan Pasir Panjang, sekolah kita di-tempatkan dalam kumpulan A, malang-nya kita terpaksa menentang pasukan yang lebih kuat dan hanya berjaya suku final sahaja :-

Queenstown Teknikal	lawan	Pasir Panjang	Kalah
" "	" "	Tanglin Teknikal	Menang
" "	" "	Newtown Secondary	Menang
" "	" "	Bouna Vista	Kalah

Kejohanan rumah2 pula, telah di-jalankan pada 4/8/70, di-dewan sekolah dengan chara kalah mati akhir-nya rumah :-

Johan 1970 : Rumah Biru
 Naib-Johan 1970 : Rumah Merah



House-Masters:— Mr. Dedar Singh
 Mr. Ang Ah Lay
 House-Mistress:— Miss Sylvia Tan
 House-Captain:— Lui Ai Suan
 Vice-Captain:— G. Eravanan
 Secretary:— Heng Chiang Wee

BLUE HOUSE

This year, our House came in third in the School's Annual Athletic Meet. Our outstanding athletes, Lui Ai Suan of the 'A' division and Wang Cher Chuang of the 'B' division were individual runner-ups in the Meet.

In the Inter-House Cross-Country Race, our 'B' division Boys came in first but the 'A' division did fairly well.

Our House was runner-up in the Inter-House Badminton Tournament.

We wish to thank the House-Masters and Mistress and Captains of the various games for their unending guidance and hardwork.

Secretary.

House-Masters:— Mr. Victor Dawson
 Mr. Lim Hong Tuan
 House-Mistress:— Mrs. Teo Ai Hoon
 House-Captain:— Siu Kim Beng
 Vice-Captain:— Richard Loh
 Secretary:— Alfie Goh

GREEN HOUSE

Our performance in this year's Annual Athletic Meet was satisfactory compared to that of the previous year. The results in the Meet were not up to our expectations.

In the Inter-House Tournaments, our boys did very well.

Credit should be given to the House Masters and Mistress, Mr. Dawson in particular who personally supervised the House practices.

Secretary.

House-Masters:— Mr. Lee Fok Leong
 Mr. Ong Ann Kok
 House-Mistress:— Mrs. Lee Yung Soon
 House-Captain:— Foo Shiang Tong
 Vice-Captain:— Richard Loh
 Secretary:— Herminder Pal.

RED HOUSE

1970 has been quite a good year for our House as we did fairly good in most of the games.

In the Cross-Country race the performance was generally worth an effort. The overall result has not been very good but we expect to do better in the following year.

Last, but not least we would like to thank our House Masters and Mistress for their invaluable guidance and dedications in bringing success to our house.

Secretary.

House-Masters:— Mr. Lee Tik Soo
 Mr. Lee Han Peng
 House-Mistress:— Mrs. Thia Mui Cheng
 House-Captain:— Yeo Tiong Leng
 Vice-Captain:— Low Huat Heng
 Secretary:— Lee Cheng Kiat

WHITE HOUSE

This year was a successful one for our House. We held our practices every Thursday and there were good responses.

In the Inter-House Cross-Country Race, our Junior team took the first, second and third position. But the Senior team did not do well in the race. Our House emerged champion in the Annual Athletic Meet.

Finally on behalf of the House, I would like to express my thanks and gratitude to our House-Masters and Mistress for their help and guidance.

Secretary.

House-Masters: — Mr. Toh Kim Kang
Mr. Leong See Hoy
House-Mistress: — Miss Tan Yong Kheng
House-Captain: — Chan Soon Yee
Secretary: — Low Wai Chee

YELLOW HOUSE

It was during the first term that our first general meeting of the year was convened. It was during this meeting that the officer bearers were elected.

Practices for the Annual Athletics Meet were almost immediately commenced. Due to enthusiasm of our members, we were able to have practices every Friday. In the Meet that was held in Meet, we emerged as runner-up.

The other games that were constantly practised were soccer, badminton, table-tennis, volleyball, basketball and swimming. We were at present, looking forward to win the School's Annual Swimming Carnival.

It is our hope that members of the House would build up even greater interest in the field of sports in the years to come.

Secretary.

SHARIKAT

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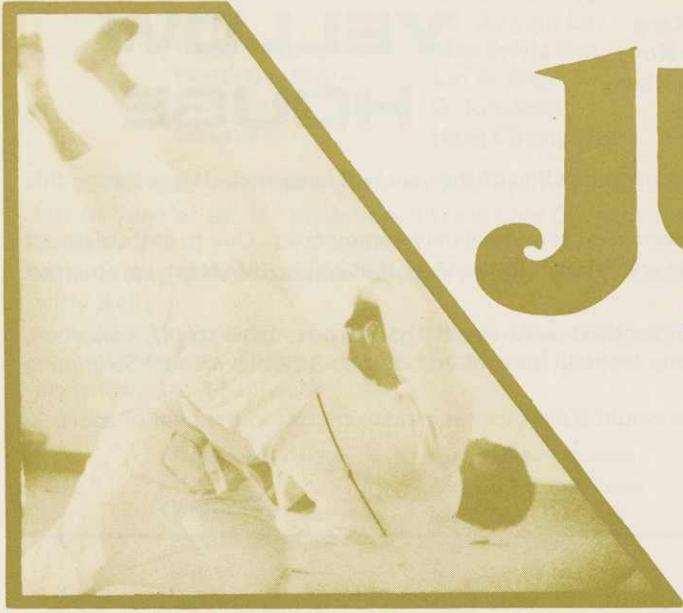
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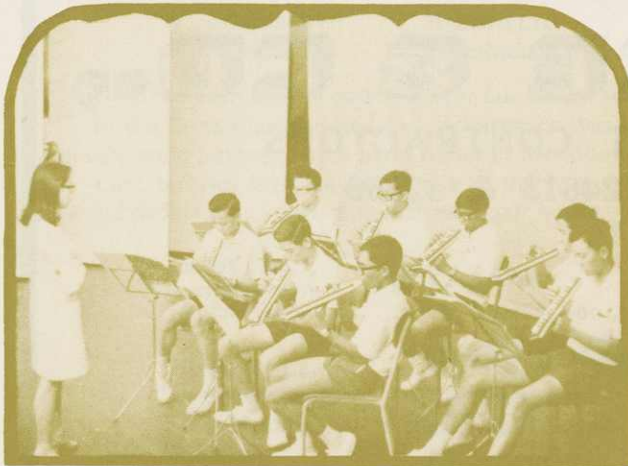
JUDO CLUB



Teacher-in-Charge : Mr. Alfred Loh

The Judo Club has a membership of about twenty. Practices were conducted on every Wednesday and Saturday. There are one green belt and six orange belt holders. Of this, five were selected for the school team. This team represented our school in the National Judo Championship.

Lim Ting Fai
Captain.

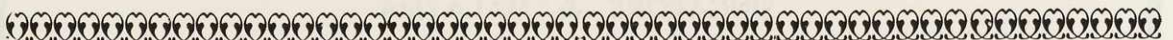


MELODICA GROUP

Teacher-in-Charge : Miss Chan Lin Peng
Treasurer : Chow Yew Seng
(Sec. 3 EI)

This committee of 8 is very closely affiliated to the Recorder group. The members together with those from the Recorder group held their practices on Saturday morning.

The members also participate in the School's Annual Speech and prize-giving day.



School Library

Teachers-in-Charge : Mr. Cheng Chiu Chang
Mr. Wong Chong Heng
Mrs. Tay Tze Ching.
Miss. Po Ah Moey

Chief-Librarian : Richard Tan Kok Tong
Secretary : Freddie Kee
Treasurers : Cheong Pok Sing
Ng Nai Fatt

Executive Council
Typist : E Peng Sim
Artist : Tan Saik How
Compiling : Jway Ching Hua
Magazines : Sng Hock San
Reference : Richard Tan
General Lending : Loi Kok Leong



At present, the library has about 5,500 books, of which about 5,000 are for general lending and the rest for reference.

General lending Section:

Books ranging from friction to applied sciences were lend out every Monday, Wednesday and Friday. The average number of books borrowed per library day has increased from 25 to 40.

Reference Section:

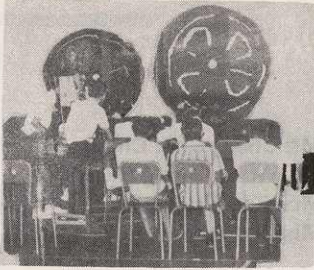
This section is opened every Tuesday and Thursday. Many useful data, encyclopaedia etc. are available for reference.

THE DAY was hot, the training squad hopeless, the sergeant exasperated. He called his shambling crew to a halt and cried in despair, "I dunno what to do with you!" Hopefully the raw recruits looked towards the shady trees . . . "Yes, I know," the sergeant responded. "But I haven't got enough rope."

Overzealous candidate to audience:

"Ask not what your country can do for you; ask what you can do for me."

We should give thanks to our men of science. Why, do you realise that, if it hadn't been for Thomas Edison, we would all be watching TV by candlelight?



FILM SOCIETY

Adviser :	Mr. Dedar Singh	Vice-Secretary :	Ho Soon Chuan
Chairman :	Freddie Kee	Treasurer :	Herminder Pal
Vice-Chairman :	Chow Tat Yan	Business Manager :	Chew Tai Theng
Secretary :	See Chin Kiong	Power Unit Head :	Lim Kim Seng

The aim and function of the society is to screen films of educational value and also to provide entertainment at a minimum cost.

Several film shows were organised, one of which, on 13th March was in aid of the school Magazine. An excursion to the U.S.I.S. Theatre was held in April. We also established contacts in nearby schools and even introduced a show strictly for girls.

See Chin Kiong
Secretary.

aeromodelling

CLUB



Adviser :	Mr. Wong Soon San
Chairman :	Tai Lee Ping
Secretary :	Sim Eng Ann
Treasurer :	Lee Wah
Technicians :	Jimmy Koh Choy Matdiah Bin Mohd.

Activities were carried out under the supervision of experienced members. The amateur rocket enthusiasts were not allowed to handle the fuel which was regarded as explosive, so they switched to aero-modelling.

Most members were keen in handling aero-modelling components. Some were proficient in starting engines and some were capable of handling a trainer plane.

Tai Lee Ping
Chairman.

A FATHER looked at his son's report card from school and said : "One thing in your favour – with these low marks, at least you're not cheating."

ATHS

Teachers-in-Charge :	Miss Sylvia Tan Mr. Teo Seng Kee
Chairman :	Eng Poh Tian
Vice-Chairman :	Tan Chiat Pang
Secretary :	Chang Weng Lum
Treasurer :	Oon Tik Lee

To cater for the interest of members, various activities were organised. Visits to manufacturing plants were conducted. Documentary film shows mainly on science topics were screened every alternate Friday. One of our main projects was the organising of the Inter-class Science Quiz which was held on 17th July. A total of fourteen classes participated. During the August Holidays, an excursion to several plants in Jurong was conducted. Educational talks by prominent speakers will also be held during the third term.

CIENCE


Chang Weng Lum
Secretary.



GARDENING CLUB

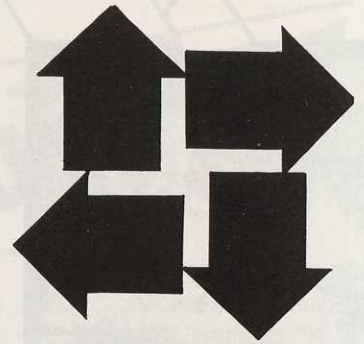
Advisers :	Miss Po Ah Moey Miss Cheng Soh Mian
Chairman :	Chan Yew Cheong
Secretary :	Chang Yau Fook
Treasurer :	Chiang Kah Kee

The aim of this club is to promote the appreciation of natural beauty. With the skill and knowledge of gardening, the enthusiasts have helped in maintaining the school garden. Through great care and hardwork, a variety of flowers such as the Ixora, Canas, Roses, Lilies and Orchids were grown successfully.



Chang Yau Fook
Secretary.

CAREERS CLUB



Advisers	:	Mr. Param Mr. Philip Chua
Chairman	:	Lim Syn Soo
Vice-Chairman:		Lee Chiew Weng
Secretary	:	Cheng Toon Foo
Editor	:	Poh Hock San
Typist	:	Wong Chee Kong
Artist	:	Lui Ai Suan

It has been observed that most pupils leave school with out the faintest idea of what career to pursue and where their aptitude lies. To remedy this, the Careers Club was set up at the beginning of this year.

The enormous task facing the Club is that of offering vocational guidance. In line with the Club's policy of acquainting school leavers with various job opportunities, career talks were organised.

It is hoped that the pupils who leave school at the end of the year will keep the school informed of their progress either in the world of work or institutions of higher learning. Only then, can the school's placement service function effectively.

Cheng Toon Foo
Secretary.

THE INTERACT CLUB

President	:	Leong Onn Kay
Vice-President :		Doreen Yip
Secretary	:	Foong Wing Hin
Vice-Secretary :		Teong Swee Huat
Treasurer	:	Wong Kum Meng
Directors	:	Yam Peng Kong Ng Mui Huat Chiang Kah Kheng Lai Foo Seng



The first project taken by the Club was the making of a bicycle stand and fitting it onto the bicycle from Rotarian Peter Gaskell. The bicycle together with the stand was presented to the Spastic Children Association of Singapore. We also helped the Kidney Foundation to sell flags. Educational film shows were screened. Throughout the year, we have been rendering help to the Lee Kong Chian Children Centre.

Foong Wing Hin
Secretary.



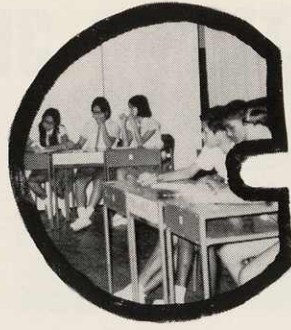
Teachers-in-Charge	:	Miss Shanta Abisheganaden Miss Silvia Tan
Secretary	:	Ang Soon Sain
Vice-Secretary	:	Tan Kiat Hock

Since its formation in 1969, this group has expanded considerably. The group meets every Friday. this meetings an attempt is made to increase understanding and appreciation of the different folk songs of the world. The guitarist accompanying the group is Koh Eng Tat.





IVICS



CLUB

- Advisers : Miss L. K. Kuah
 Mr. P. K. Hernon
- Chairman : Lim Kim Seng
- Vice-chairman : Tan Yeow Hee
- Secretary : Seow Yin Leong
- Treasurer : Poon Swee Kay

During the first term, meetings were held weekly. Excursions to Swan Sock Factory in Jurong and Van Houten Chocolate were also conducted. We were very fortunate to have Mr. G. W. Priestly of Cycle and Carriage to address the pupils on careers in Mechanical Engineering.

However, the highlight was the inter-school Quiz held in our school. It was won by representatives of Crescent Girls' School. Members of the club were also called upon to sell flags.



Seow Yin Leong
 Secretary.

SAFETY FIRST SOCIETY



- Advisers : Mrs. Lee
 Mr. Lim Hong Tuan
- Chairman : Herminder Pal
- Secretary : Freddie Kee
- Treasurer : Choo Tat Yan

Our representatives, Freddie Kee and Choo Tat Yan were elected as President and committee member respectively to the Pasir Panjang District Council.

The society started its activity by taking part in a hike organised by the district council. We participated in a number of debates, and representatives were sent to participate in the Oratorical Contest and Safety First Quiz held at the Conference Hall. During the Queue-up campaign, our members are attached to various bus-stops to guide the pupils. We also attended a Fire Display by the Singapore Fire Brigade and an International Road Safety Conference held at the Singapore Conference Hall.

Freddie Kee
 Secretary.

radio CLUB



Advisers:— Mr. Ronnie Chan
Mr. Philip Chua
Chairman:— Soh Peck Lin
Secretary:— Tham Woon Yew



Throughout the history of the club, this year was the most privileged one. The members has a basic knowledge of electronic and the two work-shops enable us to carry out our projects smoothly.

In the first term, talks on electronics were given by our advisers. Activities during the second term were projects and experiments. Excursions to E.T.V. departments and various electronics firms were conducted. The Club was also responsible for the installation and maintenance of the Public Address System of the school. A newsletter was also started to keep our members informed of the current news concerning electronics.

Tham Woon Yew
(Secretary)

chess club



Advisers:— Mrs. Thia Mui Cheng
Mr. See Poon Kiong
Chairman:— Chan Soon Yee
Secretary:— Ng Cher Lek
Asst. Secretary:— Sng Hock San
Treasurer:— Doreen Yip
Asst. Treasurer:— Tok Hock Chye

Practices were held regularly every Monday and Tuesday to enable the members to improve their standard of playing chess.

During the first term, the Individual Open Championship Tournament was held for members of the club.

In the Singapore Open Championship, the following boys represented our school:—

Chan Soon Yee, Tan Buck Soon, Tang Kum Weng, Tok Hock Chye and Chong Chee Hock.

We also had few friendly matches with schools in our district.



Ng Cher Lek
(Secretary)

PHOTOGRAPHIC SOCIETY

Adviser : Mr. Yam Wai Hong
Chairman : Richard Yeo Kim Teck
Secretary : Chris. Tan Chee Yong
Treasurer : Stephen Yeo Kim Leong



In all its years it has supported the school magazine. This year is no exception.

1970 saw the membership rocketed to 422. For the first time, membership badges were issued besides the usual membership cards.

During the year, we have visited Kodak Laboratory and Allied Chocolates. A hike to Sesop Ridge was organised. We also conducted classes in theory and practices for our members.

Tan Chee Yong
Secretary.

LITERARY, DEBATING AND DRAMATIC SOCIETY

Advisers : Mr. P. K. Hernon
Mr. Alex Tan
Miss Shanta Abisheganaden

Chairman : Lim Kim Seng
Vice-Chairman: Low Wai Chee
Secretary : Robin Tan

The L.D.D.S. started off the year 1970 with the organising of an Inter-Class Short-story Writing Competition. The respond was encouraging. This success prompted us to arrange another inter-class affair, an oratorical contest this time. Twenty pupils participated and six were selected to the finals.

Robin Tan
Secretary.



JUNIOR CHOIR

Teachers-in-Charge : Miss Tan Yong Kheng
Mr. Charlie Ch'a



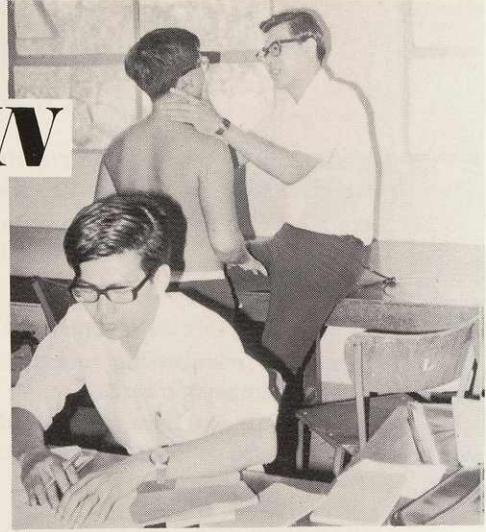
As there is a very keen interest in singing from our younger boys in Secondary Three of the afternoon session, the junior choir was found early this year.

The small group of a dozen boys are very enthusiastic and practices are held regularly twice a week in the mornings. During the two-hour practice sessions, folk songs and pop songs are taught.

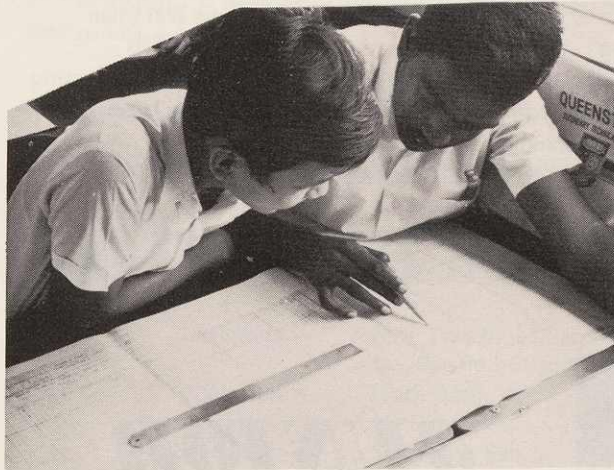
It's Happening in **QUEENSTOWN**



Chocs for free



Docs in school



Ah! This is my index number.

Mr. Queenstown Competition.



Entertaining the retarded



Stiff necks.



Scuba diving

WHAT IS A POLITICIAN ?

What kind of a man is he?

He has courage of his connections.

He has the best money can buy. . . . A person who will do anything on earth for the workers except become one. He is the seeker of the House. His is not an easy road. He must be in good health and agile. It isn't easy to sit on the fence and keep both ears on the ground and his hand in your pocket all at the same time (and all this while suffering from foot-in-the-mouth disease). If he didn't sit on the fence so much, maybe it wouldn't need to be mended as often. And when he does mend it, it's by hedging.

A phenomenal physical specimen is he. He has to run while holding his seat. What isn't stomach is head, and that mostly mouth. He can throw his hat in the ring and talk through it at the same time.

He finds out how people are going, then take a shortcut across the field, gets out in front, and makes them think he is leading the way.

He is a Liberal and a Conservative. Liberal with your money, conservative with his.

He practices the law of Capital and Labor. Taking your money at election time, that's Capital. Getting something for it? That's Labor.

He has a straight forward way of dodging all the issues; for example, when he says he will not dignify the question with a reply, that means the one he has is quite unsatisfactory. His platform, which is dismantled the day after the election, is like the platform on the back of a streetcar.

It's not to stand on. It's to get in on! The only time he really needs this platform is when he hasn't a leg to stand on. . . . which is often.

He can stand up and rock the boat and make you believe he is the only one who can save you from the storm.

He know all the answers. It's those darn questions that keep fouling things up.

He has the ability to foretell what will happen to-morrow, in a month next year! And to explain afterward why it didn't happen.

He shakes your hand before an election and your confidence after.

He makes life a bed of ruses.

He stakes his career on few well-chosen words and stands on his record. . . . that's to keep you from examining it.

His is the art of obtaining money from the rich and votes from the poor, on the pretext of protecting one from the other.

"Would you want your sister to marry one?"



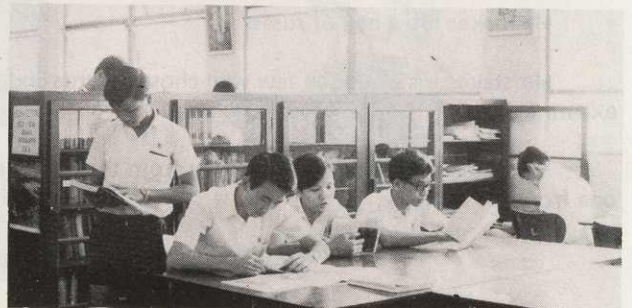
LEISURE

&



WORK

*'The Conclusions'
Finalists
of Schools Talente.*





WOMAN



Here's to woman! Would that we could fall into her arms without falling into her hands. — **Ambrose Bierce**

Believe a woman or an epitaph,
Or any other thing that's false. — **Byron**

Between a woman's Yes and No
There is not room for a pin to go. — **Cervantes**

A woman, a dog, and a walnut-tree,
The more you beat 'em the better they be. — **Thomas Fuller**

The Eternal Feminine draws us upward. — **Gorthe**

Woman and music should never be dated. — **Goldsmith**

If men knew how women pass the time when they are alone, they'd never marry. — **O. Henry**

I am very fond of the company of ladies; I like their beauty, I like their delicacy, I like their vivacity,
and I like their silence.
— **Samuel Johnson**

For the female of the species is more deadly than the male. — **Kipling**

The woman was not taken
From Adam's head, we know,
To show she must not rule him —
'Tis evidently so.
The woman she was taken
From under Adam's arm,
So she must be protected
From injuries and harm. — **Abraham Lincoln**

I expect that woman will be the last thing civilized by man. — **George Meredith**

O woman, born first to believe us;
Yea, also born first to forget;
Born first to betray and deceive us,
Yet first to repent and regret! — **Joaquin Miller**

God created woman. And boredom did indeed cease from that moment — but many other things
ceased as well. Woman was God's second mistake.
— **Nietzsche**

Prince, a precept I'd leave for you,
Coined in Eden, existing yet:
Skirt the parlor, and shun the zoo —
Woman and elephants never forget. — **Dorothy Parker**

Woman is as false as a feather in the wind.
(La donna e mobile
Qual piuma al vento) — **F.M. Piave**

For never was it given to mortal man
To lie so boldly as we women can. — **Pope**

Give God thy broken heart, He whole will make it:
Give woman thy whole heart, and she will break it. — **E. Prestwich**

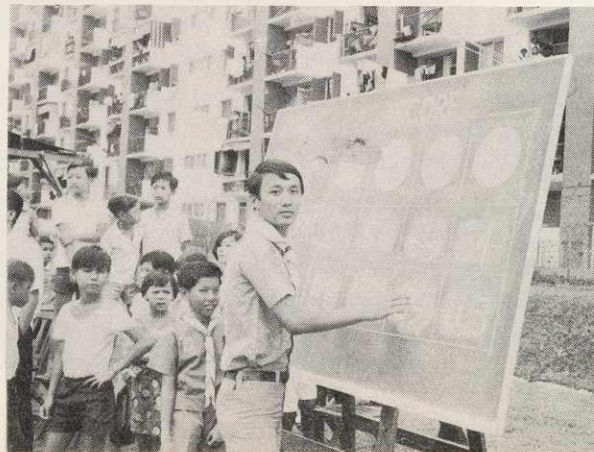


TRIUMPH

&



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MAN



There are four sorts of man :

He who knows not and knows not he knows not: He is a fool – Shun him;

He who knows not and knows he knows not: He is simple – Teach him;

He who knows and knows not he knows: He is asleep – Wake him;

He who knows and knows he knows: He is wise – Follow him.

– **Lady Burton**

Man is a noble animal, splendid in ashes, and pompous in the grave, solemnizing natiivities and deaths with equal lustre, not omitting ceremonies of bravery, in the infamy of his nature.

– **Sir Thomas Borwne**

Man's inhumanity to man

Makes countless thousands mourn.

– **Burns**

Man, biologically considered.is the most formidable of all the beasts of prey, and, indeed, the only one that preys systematically on its own species.

– **Williams James**

Man is a rope connecting animal and superman – a rope over a precipice. What is great in man is that he is a bridge and not a goal.

– **Nietzsche**

Man is a reed, the weakest in nature, but he is a thinking reed.

– **Pascal**

Man is the measure of all things.

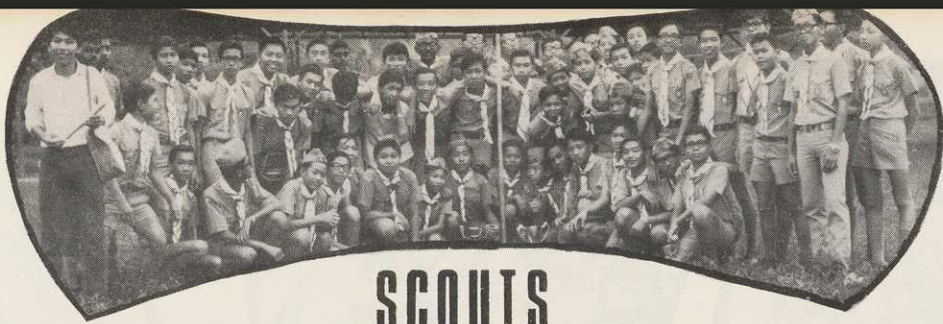
– **Pythagoras**

Man is the only animal that blushes. Or needs to.

– **Mark Twain.**

Man are but children of a larger growth.

– **Dryden**



SCOUTS

The two venture units were under the charge of:

	V.S.L. :	Mr. Lim Koon Yong	Beaver
	A.V.S.L.:	Mr. Wat Kum Chin	Bat
	A.V.S.L.:	Mr. Leong See Hoy	Dolphin
Section A: —	S.L. :	Mr. Chan Kok Weng	White Eagle
Section B: —	A.S.L. :	Mr. Tan Jeng Pock	Bagheera
	A.S.L. :	Mr. Ong Ann Kok	Bamboo
	A.S.L. :	Mr. Chan Kok Heng	Octopus

This year, the movement brought in a total of \$1,520/- of which \$990/- came from the Scouts and the rest from the Ventures.

The highest earner of 1969 was Wellington Sng of the Venture section.

2nd term: Campfires

The group host the 1969 Queenstown District Annual Campfire to commemorate the 150th Anniversary of Singapore.

Hikes:

Picnics, barbecues and hikes to Bukit Timah and Mt. Faber were organised. A week end camp was held at Tanah Merah.

District Scouts Rally:

We emerged as District overall champion in this rally which was held on our school ground.

Singapore Patrol Camp:

Two patrols of seven each, represented the district in this camp which was held at Sarimbun to commemorate the 150th Anniversary of Singapore. The Venture patrol won the Second Prize Shield.

3rd term

V.S.L. Mr. Wat Kum Chin, left the group to join the T.T.C. The group thank him for his valuable services. Mr. Leong See Hoy and Mr. Chan Kok Heng filled the posts of A.V.S.L. and A.S.L.

Two members Tan Koh Tong and Lee Chiew Kum represented Singapore at the 6th National Jamboree, in Thailand.

The members participated in the cross-country and annual athletic meets.

About 30 scouts and ventures helped to put up several Pioneering projects for the Singapore Cadet Scouts Field Day.

It is with regret that only \$1,000/- was earned by our members. With an average of \$9.71 cts. per boy, we still emerge as the District champion

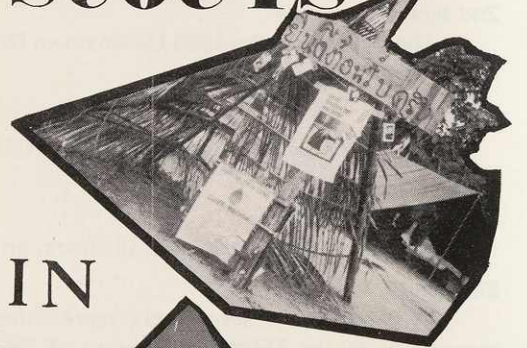
This year's District Scout Rally was held at Newton's Secondary School. We were again the overall district champion. We were thus the champion in 5 successive years except (1968): 1965, 1966, 1967, 1969 and 1970.

Every Saturday, the members meet to participate in parades and lessons.

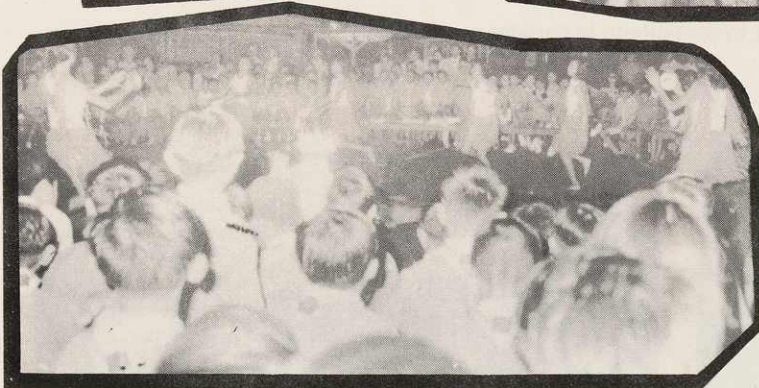




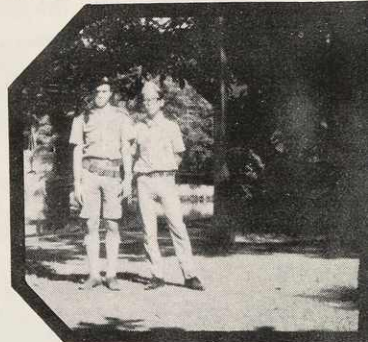
1903
SCOUTS



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NATIONAL CADET CORPS (SERVICES)

QUEENSTOWN UNIT

Officers : 2Lt. Tam Wing Hong (Officer Commanding)
2Lt. Yoong Choon Yee
2Lt. Chew Sang Song
2Lt. Wong Liang Yong
Lt. Lui Seng Kiew (NCC Sea Centre 3)

N.C.O.s : Sergeants — 2
Coporals — 5
L/Coporals — 15

Strength : NCC (Land) — 26 3rd Year
— 40 2nd Year
NCC (Sea) — 32 3rd Year
— 9 2nd Year
NCC (Air) — 17 3rd Year
— 3 2nd Year

Total — 127 Cadets

Introduction

The NCC (Services) Queenstown Unit comprises the Land, Sea and Air cadets. Cadets are recruited at Secondary 2 level and given General Military Training after which they receive vocational training in the 3 services in the 2nd and 3rd Years.

NCC (Land)

This year we lost the services of 2Lt. Swaran Singh who was transferred to the National Junior College. The unit is grateful to him and at the same time welcomes 2Lt. Wong Liang Yong.

During the Saturday parades in school, our cadets are trained in foot and rifle drill, weapon handling, combat and map reading. 0.22 range practices were also held at Beach Road Camp. The annual camps were held during the school holidays:

1st year cadets — August 1969
2nd year cadets — December 1969
3rd year cadets — April 1970

All camps were held at the Singapore Armed Forces Training Institute.

NCC (Sea)

All NCC (Sea) cadets report for training in seamanship, navigation and chartwork at Centre 3, Pasir Panjang Malay School on Saturdays. In addition they receive practical training in boatwork and attend weekend camps afloat. The annual camp for 3rd year cadets was held in April 1970 at Centre 3, during which time the cadets had 0.303 range practice at Bukit Timah Rifle Range, and a day at sea training with the Sea Defence Command on board a patrol launch.

The year 1970 will be remembered as a year of success and achievement for our unit. Out of 9 NCC (Sea) Cadet Annual Scholarships, a record of 4 were awarded to our cadets:

Cpl. Derek Chan and Pte. Abdul Samad were awarded the Straits Steamships. They will be trained on board a ship sailing for Borneo. L. Cpl. Lee Kim Soon and L. Cpl. Pang Seng Kwee were awarded the Sheel Scholarship and will also be trained on board a ship.

To add to our achievement, 3 cadets successfully completed a Swimming and Life Saving Course at FARELF and were awarded medals and certificates. The cadets are Cpl. Derek Chan, Pte. William Heng and Pte. Leong Chung Pun.

NCC (Air)

Lectures on flight, navigation, engineering and meteorology are given to the cadets by NCC (Air) officers on Saturdays. All the cadets visited the R.A.F. at Changi where they were shown the duties of the various squadrons. This was followed by air rides on the Andouer aircraft. A similar visit was organised to the Paya Lebar Airport.

Towards the end of 1969, all 3rd year cadets were given flying training in Cessna 172 aircrafts at the Singapore Flying and gliding school in Seletar. Successful cadets would be considered for further training to qualify for a Private Pilot License. The annual camp for the cadets was held at Seletar.

Conclusion

Cadets from the Land, Sea and Air services participated in the National Day Parade and the Youth Festival Opening Ceremony parade in 1969. Services were rendered in our School sports and the Pasir Panjang District Sports as well as the Silat Primary School sports. On the 1st of July the Singapore Armed Forces Day, our cadets helped to sell flags in aid of the Ex-services Association of Singapore. The NCC Day will be held for the first time this year on the 1st August, when the school units and training centres will be open for public visit.



*From left to right:
L/CPL Pang Seng Kwee, L/CPL Lee Kim Soon,
CPL Derek Chan, Pte Abdul Samad.*

**Please Patronise
Our Tuckshop Vendors**

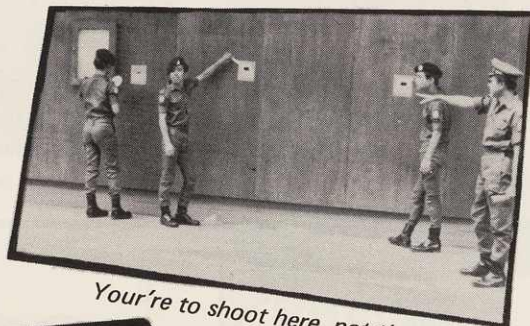
To Cuba or Beirut?



take aim



QUEENSTOWNIANS TAKE TO, THE AIR



Anyone
for
a
HIJACK??

Your're to shoot here, not there ...



Ready for action.



ST. JOHN'S AMBULANCE BRIGADE

Strength:

Officer: 1) Mr. Lim Soy Soy
2) Mr. Teo Meng Tuck

Corporal : 2
L/Corporal : 9
Secretaries : 3
2nd Year Cadets : 26
3rd Year Cadets : 27

THE UNIT:

This year, our corps did not recruit any new members, leaving its strength to 67 members. 4 members were promoted to the rank of Lance corporal and the 3rd year cadets took their first-aid re-examination last December.

The 2nd year cadets also took their Basic First Aid examination on 17/5/70. The unit also held a re-registration for the members of the corps on 25/2/70.

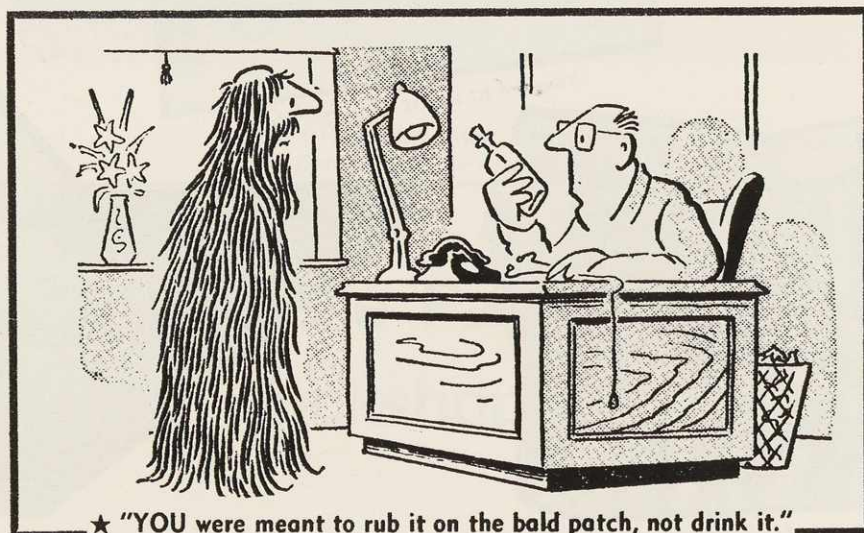
Training:

Parades were held every Saturday morning. The training programme includes Foot-drill, Stretcher-drill. Physical exercises and First Aid. In addition, the 3rd year N.C.O.'s also train the 2nd year cadets to be N.C.O.'s.

Public Duties Performed:

Duties were also performed at the School Inter-House Cross-country Race and The Great World Trade Fair, School Annual Athletic Meet and Queenstown District Scout Meet, School Annual Swimming Carnival as well as National Day Parade.

Divisional Officer,
Queenstown Cadet Division
First Corps, West Area.

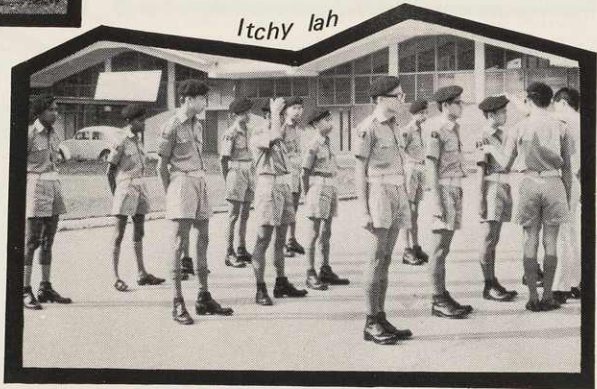


St. John's

Ambulance Brigade



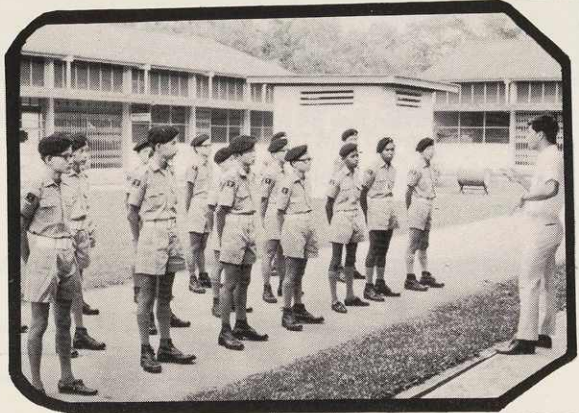
Poor business?



Itchy lah



To the rescue



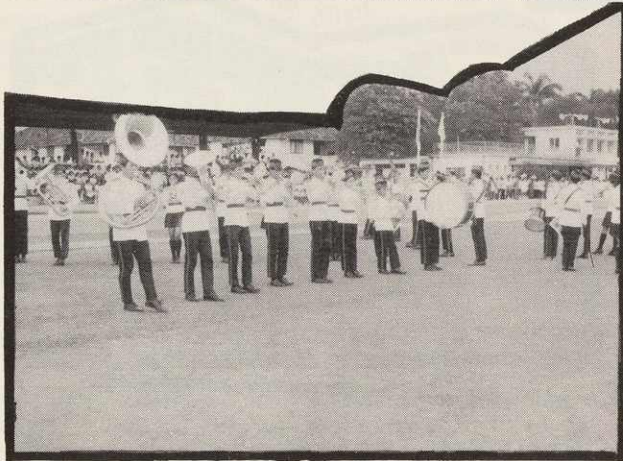
Scratch only when



All in stockinged feet.



Stiffarm?



SCHOOL BRASS BAND

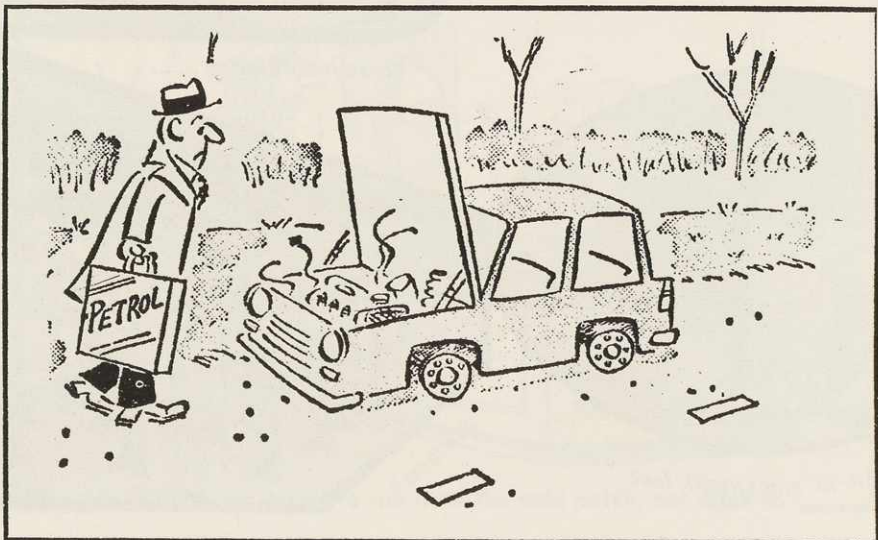
Instructor : Mr. E. Hendricks
Drum Major : Ow Weng Kwok



The committee has 34 members. The pupils practice twice a week.

This year we participated in the open ceremony of the schools speech day, sportsday and National day celebration.

On 24th April, 1970, we participated in Central Band Judging but were not selected.



NATIONAL CADET CORPS (POLICE)



Officers : Insp. Lee Lok Onn
Insp. Teo Yeow Seng
Insp. Charlie Eu Weng Kee

N.C.O.s : Sergeant - 1
Corporal - 4
L/Cpl. - 8

Cadets : Sec. 4 - 15
Sec. 3 - 42

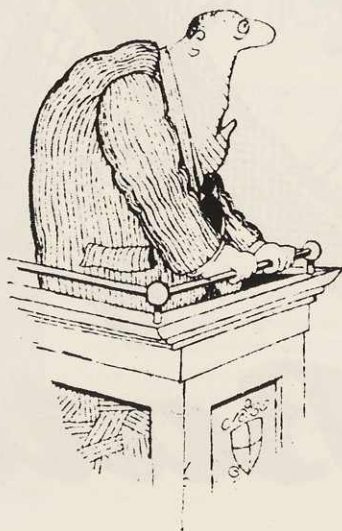
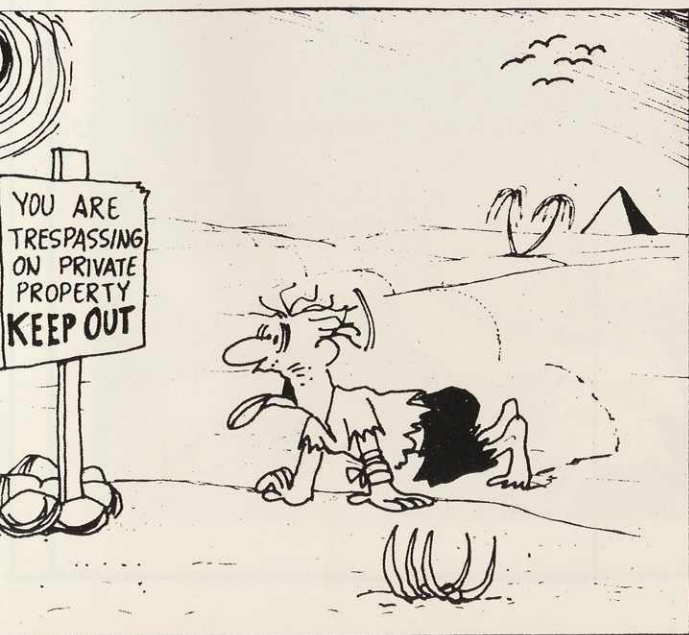
As there were no Secondary Two Classes in the School this year, no recruits were taken. However, 13 boys, who joined the School at Secondary Three level and were members of the Corps in their previous schools, were accepted into the Unit.



Parades were held every Saturday. The training programme included Foot/Rifle Drill, Unarmed Combat, Law and First Aid. Regular Police Officers from the Queenstown Police Station taught the Cadets in Dry Firing Practices. First Aid was taught by Mr. Charlie Chia Chaing Soo.

The Cadets participated in the following Competitions:-
.22 Revolver Shooting, PCC Quiz, Deputy Commissioner's Annual Inspection and Drill, and the Inter-Unit 22 Revolver Shooting. They also took part in the Youth Festival Opening Ceremony and the National Day Parades. During the April Holidays 1 Officer and 12 Cadets attended the PCC Annual Camp for Sec. 4 Cadets at SAFTI.

The Unit was visited regularly by the District Officer, Mr. Edmund Tay Bin Thong, ASP and his assistant Mr. Tonny Koh, ASP.



"I am innocent your Honour, and I would like you to take into consideration 37 other offences of which I am innocent."

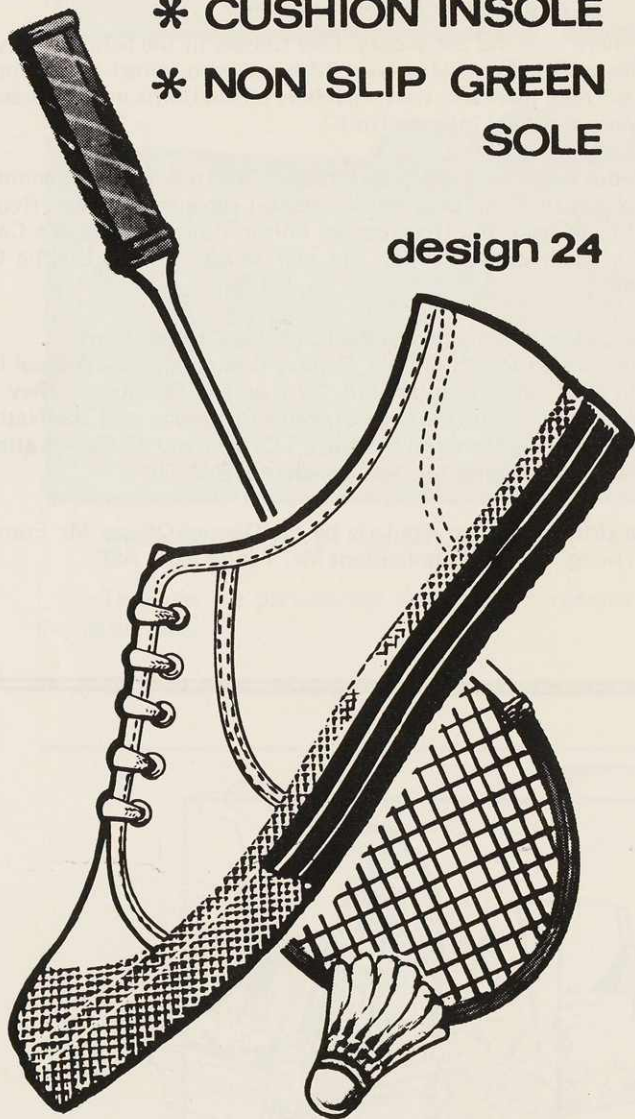
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design 24



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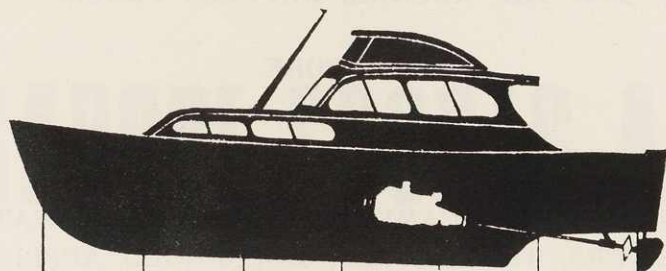
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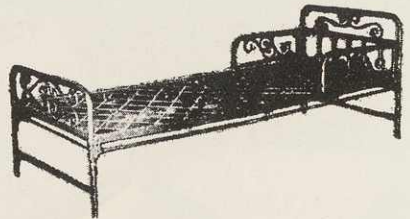
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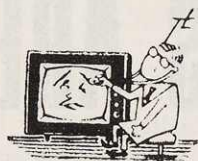
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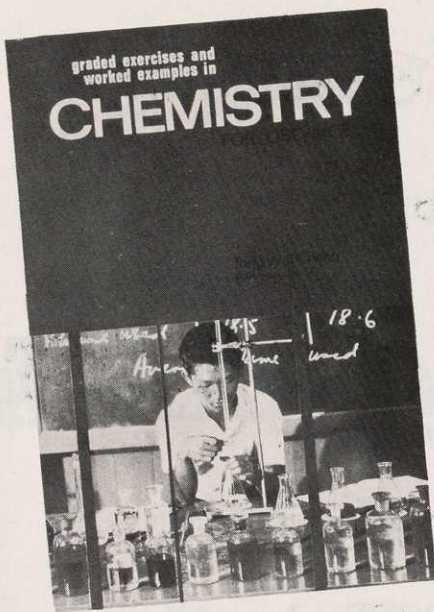
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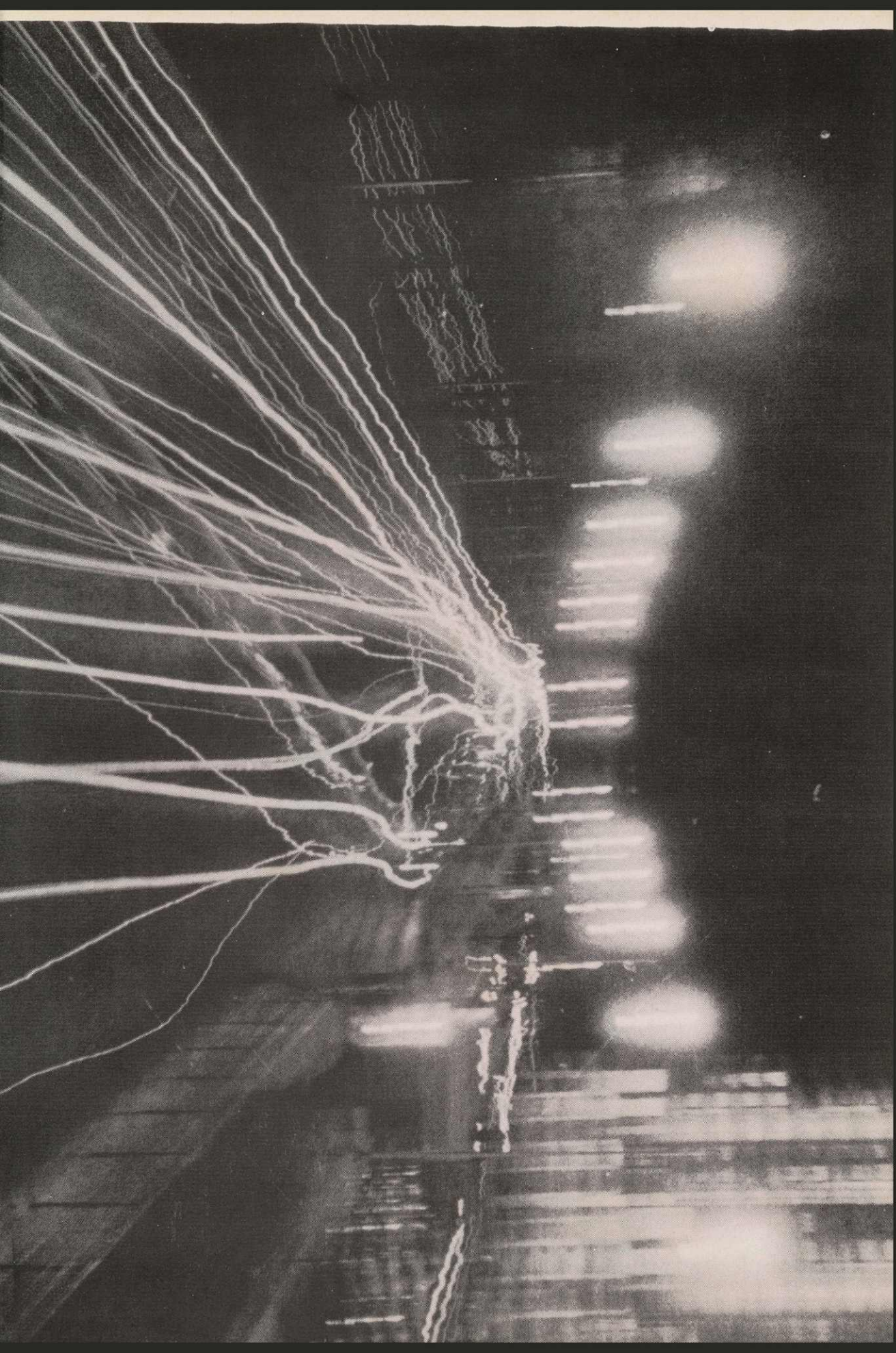
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