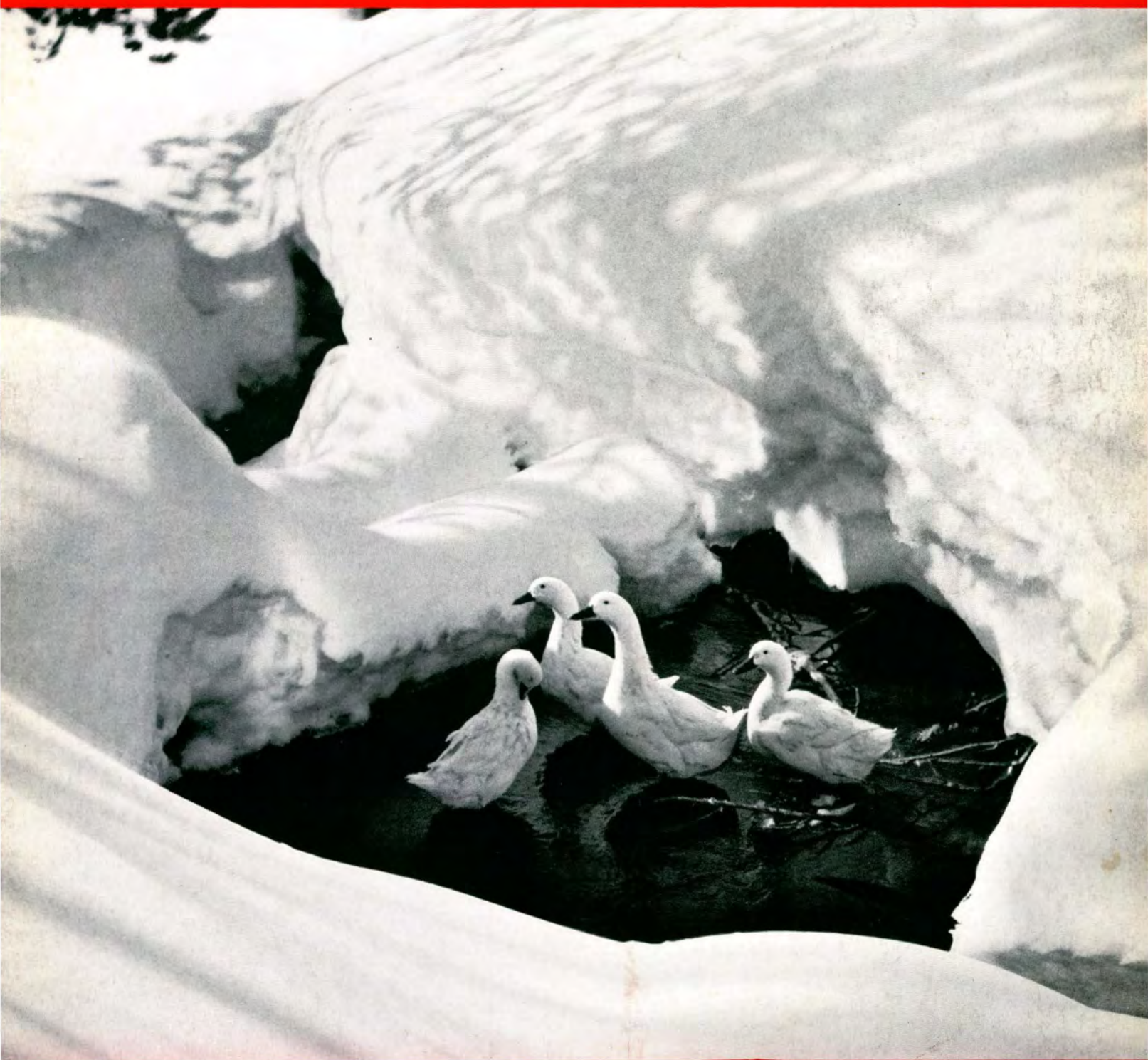


KODAK

A Magazine for Eastman Employees



FEBRUARY • 1943



"Follow the Leader"

IN THIS ISSUE

"Swimmin' Hole"— <i>Spring's a-coming</i>	Cover
Photography in 1942— <i>Review of progress</i>	1
Ambassador Greets "Ambassadors"— <i>at Kodak</i>	3
Panorama— <i>Mainly from the mailbag</i>	4 and 5
Nurses' Aides on the Home Front— <i>A grand response</i>	6
Grounded—but Going Strong!— <i>A Camera Club class</i>	7
Pictures of Our Men in Uniform— <i>Pages from war album</i>	8 and 9
Preview— <i>Eastman acetate in spring parade</i>	10
Four Letters— <i>Telling of star award</i>	11
Out of the Hat— <i>5-star fathers</i>	14 and 15
Kodak Soldier Is Model— <i>For "Post" cover</i>	16
There Remains Much to be Done— <i>From "Musical Pictures"</i>	16

For a Close-Up on Japan, See Inside Back Cover

ANNUAL REPORT
EASTMAN SAVINGS AND LOAN ASSOCIATION
DECEMBER 31, 1942

ANNUAL REPORT

EASTMAN SAVINGS AND LOAN ASSOCIATION

ASSETS AND LIABILITIES AS AT DECEMBER 31, 1942

ASSETS			LIABILITIES		
	DEC. 31, 1942	DEC. 31, 1941		DEC. 31, 1942	DEC. 31, 1941
First Mortgage Loans	\$ 7,249,129.96	\$7,429,488.54	Due to Shareholders:		
Share Loans	45,648.50	80,376.50	On Income Shares	\$ 4,454,000.00	\$4,369,800.00
F. H. A. Modernization Loans	42,720.51	93,922.44	On Savings Shares	3,067,286.29	2,271,612.30
Real Estate Sold under Contract	75,056.92	106,143.34	On Installment Shares	1,757,081.34	1,704,326.07
Real Estate Owned	10,630.47	81,767.96		\$ 9,278,367.63	\$8,345,738.37
U. S. Government Bonds	2,681,180.00	350,180.00	Deposits by Shareholders for Purchase of War Savings Bonds of Series E	383,550.00	45,675.00
Shares in Savings and Loan Bank and Other Associations	118,000.00	118,000.00	Prepayments by Shareholders for Taxes and Insurance on Mortgaged Properties	161,878.39	123,806.02
Cash on Hand and in Bank	463,002.52	890,214.69	Deferred Profit on Real Estate Sold	17,808.69	25,312.82
Cash Deposited with the Federal Reserve Bank of New York*		37,500.00	Mortgage Loans in Process	51,518.33	
Due from Shareholders for Taxes and Insurance Advanced	4,610.86	10,566.68	Other Liabilities	2,598.21	1,319.78
Furniture and Fixtures, <i>Less</i> Depreciation	9,278.88	9,485.01	Total Liabilities	\$ 9,895,721.25	\$8,541,851.99
Other Assets	553.10	560.98	Reserves	\$ 100,000.00	\$ 100,000.00
			Surplus	600,000.00	450,000.00
			Undivided Profits:		
			Undivided Profits at Beginning of Year	116,354.15	110,642.20
			<i>Add:</i> Profits for Year	120,736.32	86,520.70
				\$ 237,090.47	\$ 197,162.90
			<i>Deduct:</i> Amounts Transferred to:		
			Surplus	133,000.00	59,000.00
			Reserves		21,808.75
			Undivided Profits at End of Year	\$ 104,090.47	\$ 116,354.15
			Total Reserves, Surplus, and Undivided Profits	\$ 804,090.47	\$ 666,354.15
	\$10,699,811.72	\$9,208,206.14		\$10,699,811.72	\$9,208,206.14

*The Association is an agent for the sale of United States War Savings Bonds of Series E, and up to August 31, 1942, had been required to maintain this deposit.

INCOME ACCOUNT FOR YEAR ENDED DECEMBER 31, 1942

EXPENSES AND DIVIDENDS			INCOME		
	For the Year Ended			For the Year Ended	
	DEC. 31, 1942	DEC. 31, 1941		DEC. 31, 1942	DEC. 31, 1941
Expenses:			Interest on Investments:		
Salaries	\$ 48,758.98	\$ 48,522.33	First Mortgage Loans	\$374,431.88	\$357,978.49
Salaries for Outside Services	55.65	572.91	Share Loans	2,974.64	4,150.13
Attorney's Fees and Costs	1,619.33	2,947.94	F. H. A. Modernization Loans	8,448.90	8,969.21
Depreciation on Furniture and Fixtures	3,080.76	2,719.08	Real Estate Sold under Contract	4,400.90	4,090.97
Advertising	838.34	1,116.24	Advances for Taxes and Insurance	1,442.45	2,172.20
Stationery, Printing, and Office Supplies	3,730.09	3,159.77	Shares in Savings and Loan Bank and Other Associations	3,253.25	3,215.00
Social Security Taxes	2,430.22	1,627.94	U. S. Government Bonds	12,670.22	859.67
Organization Dues	1,067.77	803.54	Total Interest Income	\$407,622.24	\$381,435.67
General Expense	8,621.33	7,404.39	Rents from Real Estate Owned	5,160.91	10,234.23
Real Estate Commissions	1,457.00	1,983.00	Dividends Forfeited on Shares Withdrawn	1,663.45	1,504.26
Real Estate Repairs and Maintenance	5,264.53	6,169.95	Profit on Sale of Repossessed Real Estate	5,780.73	380.34
Real Estate Taxes and Expenses	4,565.00	8,333.67	Miscellaneous Receipts	24.07	89.12
Premiums on F. H. A. Modernization Loans	298.11	1,168.45			
Surety Bond Premium	1,188.35	879.14			
	\$ 82,975.46	\$ 87,408.35			
Dividends:					
On Income Shares	\$110,094.46	\$117,387.64			
On Savings Shares	35,173.31	30,390.67			
On Installment Shares	54,271.85	55,936.26			
	\$199,539.62	\$203,714.57			
Transferred to Surplus	\$ 17,000.00	\$ 16,000.00			
Net Profit for Period Transferred to Undivided Profits	120,736.32	86,520.70			
	\$420,251.40	\$393,643.62		\$420,251.40	\$393,643.62

The above statements have been prepared from the books and accounts of the Eastman Savings and Loan Association and, in our opinion, correctly set forth the condition of the Association on December 31, 1942, and the income and expenses for the year ended on that date, as shown by the books. Cash, United States Government bonds, and shares in the Savings and Loan Bank and other associations were verified by actual count or certificate from the depository. Certain other limited test checks were made, but the transactions for the year were not audited in detail.

Auditors: JOHN C. McENTEE
RICHARD J. RAHM
WALTER B. FITCH

Photography in 1942: Review of Progress

Prepared by Dr. Walter Clark
and published in fuller form in
February *Popular Photography*

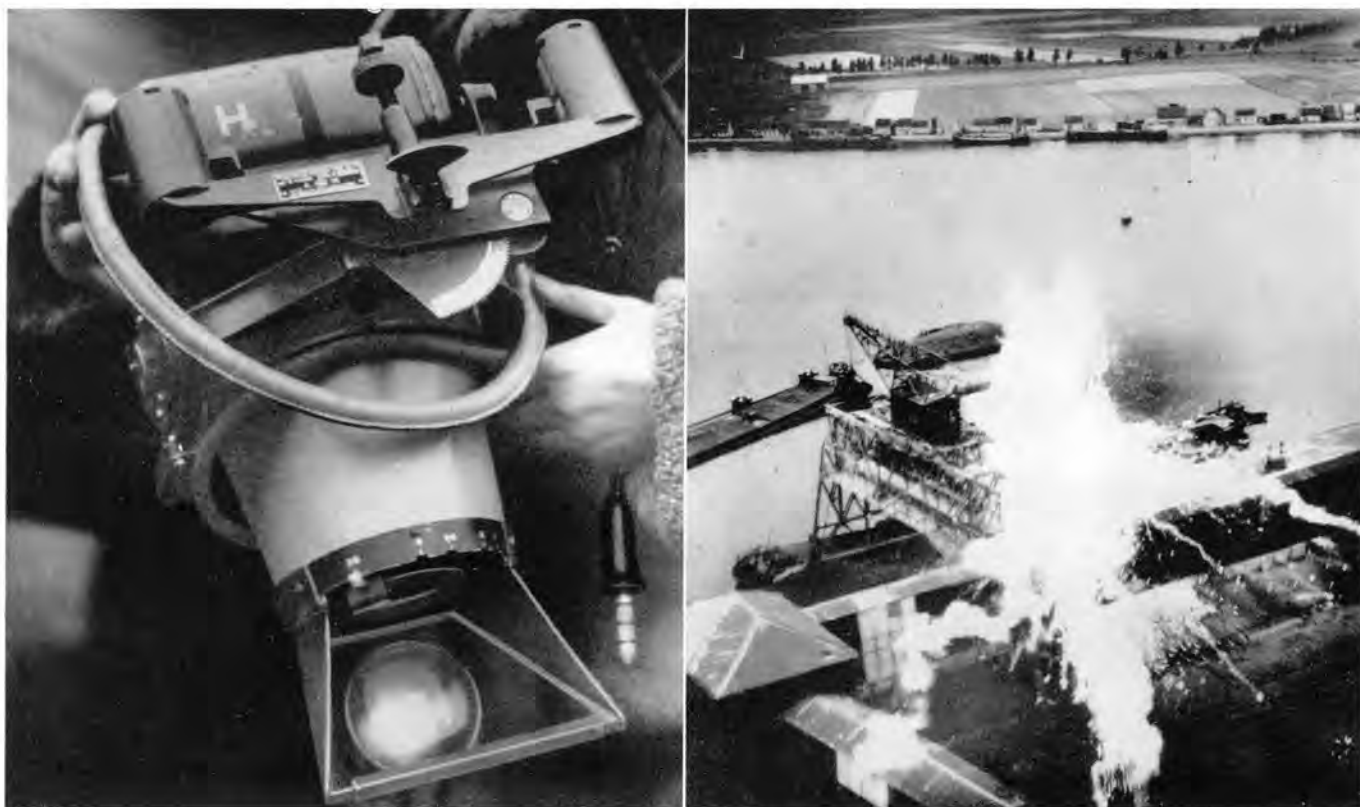
AT THE PRESENT TIME, the world's biggest customer for photographic goods is Uncle Sam—and for the good reason that photography is one of the most potent weapons of the war. In fact, a record of the progress of photography during the year 1942 is largely a story of its use by the armed forces, Government agencies, and the war industries. It should not be inferred from this that the progress is entirely one of application of old materials and principles. On the contrary, the newer and special problems of the war have resulted in a spurt in

photographic research which will also have a marked effect in photography after the war.

The pictorial press is full of striking photographs of war activities in all phases. Photographs of operations, training, new weapons of war, civilian defense, industrial activities, natural resources, and a wide range of other subjects of war interest abound in it. These are the result of a deliberate effort to use photography as a means of conveying to the public a knowledge of what is going on. But by far the greatest number of photographs made are not shown to the general public at all. They have definite purposes in such things as training, instruction and indoctrination, in

providing information of value in planning the strategy of defense or attack, and recording the destruction wrought on the enemy, and the damage incurred to our own ships, aircraft, tanks, and other weapons, and positions during action.

The three branches of the armed services most concerned with photography are the Navy, the Air Forces, and the Signal Corps. All three use both still and motion pictures, and in addition the Navy and the Air Forces make aerial photographs. The avowed policy of the Navy Department is to compile and preserve as complete as possible a photographic record of the war and to apply photography to instruction, reconnais-



For recording the results of low-level bombing, the RAF uses an aerial camera (left) with 45-degree mirror attached to the lens. The remarkable close-up at right was made from roof-top height over Holland. Note bomb splinters flying through air



Amazing detail is evident in this vertical aerial shot taken by a U.S. Army Air Forces photographer from 10,000 feet, using a 40-inch telephoto lens

sance and record, and the responsibility is in the hands of the Navy Bureau of Aeronautics. The Air Forces are concerned mainly with aerial photography for the Army, while the Signal Corps is responsible for the ground photography for the War Department which is not specifically the responsibility of other agencies.

Outstanding Example

One of the most striking films shown in the motion-picture theaters during the year was the Navy film, *The Battle of Midway*, in Technicolor. The original film was made on 16-mm. Kodachrome in Magazine Ciné-Kodak cameras, and the release prints were made by the Technicolor process, blowing them up to standard 35-mm. size. The taking of the film is an outstanding example of photographic reporting. It was made by Lt. Commander John Ford, U.S.N.R., the well-known Hollywood director, and his staff. The cameramen were so much in the action on the Island, on the sea and in the air, that much of the film was lost or ruined because concussions from the explosions burst the camera frames or caused the film to jump off the sprockets. Ford himself was wounded by shrapnel and knocked unconscious for a time.

The naval air attack on Wake Island in February was made possible largely by co-operation between Army and Navy patrol planes operating in the area. An Army plane made excellent aerial photographs of the

Japanese installations, the film was developed at Pearl Harbor, and a Navy plane dropped the finished pictures on the deck of an aircraft carrier accompanying the force designated to attack. With the aid of the photographs, the attack could be planned in detail, with heavy losses to the Japanese.

In the war in Europe and Africa, enormous use is made of aerial photographs in studying enemy dispositions, in reconnaissance prior to bombing raids, and in assessing bomb damage after the raids. It is most likely that similar use of photography is being made in all theaters of the war.

The Photographic Laboratory of the Army Air Forces Materiel Center at Wright Field has made many developments in military aerial photography during the year. The extreme cold encountered at high altitudes has led to the working out of special methods of heating cameras. Special blankets which fit the cameras consist of heat-insulated covers into which are sewn electrical heating wires. Another method is to use a loose-fitting cover into which warm air from the airplane-exhaust heater is circulated. Thin Nichrome wires are stretched across the front of lenses and filters to form electrical heating elements which prevent deposition of dew or frost on the glass. To protect the crew themselves from cold, special precautions are made to seal the camera opening in the plane against passage of air to the interior.

In some cases, the photographs are actually made through a window of flat optical glass in the cabin floor.

Operation at high altitudes or in Arctic regions has led to the Army Air Forces developing methods of aerial and ground photography and processing operations under conditions of extreme cold weather and snow. On the other hand, methods of photography and processing under tropical and desert weather conditions of extreme heat and high relative humidity have been developed. Aerial film has been successfully processed, dried and printed in the semitropics with temperatures as high as 100° F. and a relative humidity of nearly 100 per cent.

"Quick-Work" Photography

Methods of processing and drying aerial film very quickly have been developed in order to get the photographs to the interpreters as soon as possible after exposure. Portable developing and printing units have been made for use in airplanes and have been satisfactorily employed for "quick-work" photography, in which a finished print can be dropped in a very short time after exposure of the negative. The prints are made on a special waterproof-base paper which permits rapid drying, and the emulsion has a coating over it which will prevent hypo or water from a wet negative from harming the paper during printing exposure before it is

(Continued on page 12)



BRITISH EMBASSY
WASHINGTON, D. C.

January 20, 1943.

Dear Mr. Cochrane,

Quite one of my happiest recollections of Rochester is of that wonderful gathering of children you arranged for me to visit. It was a really moving experience to see so many British children gathered together, and to find them all so healthy and happy in the homes which have been found them by the large hearted hospitality of your people in the Eastman Works.

I only wish their parents could have been with me to see for themselves how well their children are looking. If they had been, they would have tried, as I did, to tell you something of the gratitude we all feel for the big thing you in the Eastman Works have done.

Yours sincerely,

Halifax

Mr. C.P. Cochrane,
Manager, Industrial Relations
Department, Eastman Kodak Company,
Rochester, N.Y.

Ambassador *Greets* "Ambassadors"

The Rt. Hon. the Viscount Halifax, K.G., British Ambassador to the United States, paid an informal visit to Kodak on January 18th, during which he was greeted at the Kodak Office auditorium by the 154 British youngsters who are in Rochester for the duration.

"You are all British ambassadors," Lord Halifax told the children, in the course of his impromptu and delightful address. "Your good friends here have been judging England by your good conduct. Therefore you are very important people."

Panorama

NOTES AND LETTERS

FROM C. Herbert Holt, of Kodak Park, come the following items on Kodak men in the armed forces: As of January 25th, the number of Park men in the service was 2,274.

Among these Kodak Park men in uniform are a lieutenant colonel,

Barnett W. Beers, and six majors: Crawford Beeson, William H. O'Connor, Guy E. Whitman, Harold C. Gunderson, John F. Hotchkiss, and C. Frank Reynolds (see also page 16).

Harry Horn tells us, as do many others, that he circulates his issue of KODAK to a number of his camp mates. It was requested in particular

I left my home to join the WAACs, I left the ones who cared,
I left with girls who like hard work—I joined a group who dared.
We followed Horace Greeley's words and headed for the West,
Though many things have made me feel that home towns are the best.
No upper berth on any train was ever built for me
Since five-feet-ten goes into four like mustard goes in tea.

We reached Des Moines on a rainy morn—a lovely day for ducks.
No taxi met us at the train—they packed us into trucks.
We rumbled over muddy roads, were scratched and knocked about.
A sudden stop, and then we all were ordered to "Get Out!"
We did—they took our candy then and told us not to smoke.
We didn't—and today we learned that it was all a joke.

They led us on from room to room and, when the day was through,
We found ourselves in barracks, feeling tired and mighty blue.
Next day, we all were fitted, measured, typed and classified.
No uniform would fit me, no matter how they tried.
The skirts were short, the coats too long, the hats a gross misfit,
And they issued me some "woolies" which I didn't like a bit.

I once had legs to which a pair of Nylon glamour lent,
They're now encased in cotton and my shoes fit like a tent.
My raincoat's short, the belt's too tight—I'm really very blue.
They look at me and say, "Dear, dear, we hadn't planned on you."
I'm tall, I know, but never guessed I'd reach such huge proportions,
That getting into Army clothes would bring on such contortions.
I squeeze and pull and stretch until I feel so very sad
But, when correctly fitted, friends, I may not look too bad.
They said they'd clothe us but, to date, quite poorly I have fared.
Cheer up—I may have a uniform when the Armistice is declared.

We march and drill and go to class and then we march some more.
We go to class and march and drill until our feet are sore.
Sometimes, when very tired, I think it would have been much brighter
To have stayed with Mr. Ingram and my faithful ol' typewriter.

They tell us we may date the boys and have fun while we can.
But the question any WAAC will ask is, "Tell me, what's a man?"
We like the boys, we all like fun, but this we can't get straight—
Just how are we to date the men when there are no men to date?

We love it though, and we're glad I know, to work toward Victory.
For, behind each boy in the AEF there's a W A A C.

—Auxiliary Charlotte B. Thomas, Kodak Office.

by one chap who was transferring to Artillery and felt lost in not knowing anything about artillery equipment. He wanted to read the article in the October issue ("We're Helping Them Blast the Target"), and seemed quite pleased and grateful for the information he obtained.

Kenneth Schleuter finds that he has traveled around considerably, and that the last issue of KODAK followed him from Fort Belvoir, Virginia, through Camp Edwards, Massachusetts, and Camp Atterbury, Indiana, catching up with him finally in Camp Claiborne, Louisiana.

Hans Felgner V-Mails from the Solomons that the captured Japs now thoroughly believe in the value of U.S. War Bonds and want to invest in them. As a "surprise package," he sent some Japanese stamps and Japanese paper money of occupation. He appropriated a saber from a Japanese major and hopes to be able to bring it home.

Very recently, Merton and Morris Vander Brooke enlisted in the Air Corps. These two boys are brothers and twins, having an interesting twin record through high school. They came to Kodak Park within a week of each other and were assigned to the same department, doing the same type of work. They each left on the same day for the same reason and headed for the same place. There are several other instances on our records of similar names and relatives. There are three John O'Briens and two William O'Connors, two Robert Johnsons and a Robert Johnston, and two Arthur J. Taylors.

From the Mailbag

A letter from Lieutenant Frank H. Wakeley (Kodak Office) reads, in part:

"All photographic activities over here are limited rather severely by censorship rules. However, I have a camera with me, and use it as much as possible.

"I've received one copy of the KODAK Magazine, and enjoyed it very much. There are probably more copies on the way some place. Incidentally, there is one thing in nearly every little Australian town that makes me feel closer to home: that is the little red-and-yellow Kodak

sign which marks the house of the local dealer.

"One great aid to the soldier's morale on foreign duty has been the V-Mail system. Mail sent through those channels reaches us appreciably quicker than does that sent the usual way. . . ."

❖ ❖ ❖

And a letter from Sergeant Clyde Petrie (Kodak Park) says:

"It seems a long time since I have written to you, and it probably is.

"I couldn't resist the opportunity. I received the KODAK Magazine, and felt proud as I read through the one that told of the Company winning the Army-Navy 'E.' I'm sure that every member of the armed forces who has worked at Kodak is equally as proud. It gives us a feeling that we aren't away from our homes and friends in vain. It proves to us that our pals that stayed behind are determined that we *are* going to return.

"That is one of the biggest boosts of morale we could have received. If only every one all over the nation would adopt that attitude, I think it wouldn't take us very long to wind this mess up.

"I know that my humble congratulations to the employees do not mean very much, but their constant good work on the home front means everything to us."

Soldiers Invest

Although no quotas have ever been set and there is no pressure upon them to do so, nearly 2,000,000 soldiers, from privates to generals, now are buying approximately \$13,000,000 in War Bonds every payday, the War Department has disclosed.

Rear Admiral Charles Conrad, chairman of the Interdepartmental War Bond Committee, who received the report of soldier War Bond purchases as part of an over-all accounting by the War Department of both civilian and military pay-roll savings, said he was so impressed that he immediately forwarded the statistics to the Secretary of the Treasury.

"There were reports," the Admiral said, "that remarkable success had been achieved by the soldiers in handling War Bond pay-roll savings campaigns, particularly in the Australian theater. The fact that every phase of the Army's War Bond



Building 62 at Kodak Park marked a notable milestone recently when the department where red-and-black duplex paper is made completed four years without a lost-time accident. Harry Ervingham and John Trahey, foreman, are shown before safety bulletin board as number of accident-free days started fifth year

Program is voluntary is a striking tribute to soldier morale."

Both abroad and in home camps and forts, the soldiers themselves have spurred War Bond purchases and have set a mark for civilians to shoot at. In some regiments, every man has subscribed to a pay-roll reservation plan. As of September 30, 1942, there were 1,619,257 rank-and-

file soldiers and officers buying War Bonds through the Army pay-roll reservation plan, with total monthly deductions aggregating \$11,154,819. For the same date, 446,109 civilian War Department employees were enrolled in the pay-roll savings plan with total monthly deductions of \$4,798,026, an average of \$10.75 per person.

Kodak Girls Who Have Completed Nurses'-Aides Course

(Story on page 6)

Kodak Park

Laura A. Brainard
Marian E. Fischer
Jean E. Graham
Jane M. Horgan
Virginia L. Horswell
Ellen Hussey
Karen M. Jensen
Louise A. Jupenlaz
Elaine M. Kimball
Elizabeth J. Kitts
Rita E. Klem
Jeanne E. Kreidler

Alice H. Petrie

Dorothy H. Schubert
Helen M. Steinfeldt
Genevieve A. Van Nest
Marie T. Weston

Camera Works

Susanne K. Brown
Rita M. Fleming
Theresa Liess
Louisa W. Martin
Dorothy T. Meyers

Hawk-Eye

Ruth L. Schlemmer
Fern J. Schwan

Kodak Office

Dorothy K. Burns
Jane E. Cary
Mary E. Fitzgibbon
Patricia E. Kennedy
Virginia A. Tickell
Janet E. Trosch
Janet M. Walker
M. Gwendolyn Wolfe

NURSES' AIDES

on the Home Front

THE FIRST DAY I went on duty I was so scared that the bottles danced on the trays as I carried them. It was awful!" She laughed softly.

"And my first job was to give a bed patient a bath!" chimed in another. "When I was actually face to face with the problem, I simply couldn't remember the procedure—so I dug into my pocket for the little package of three by five cards I'd previously typed out for myself, found the one on the 'Bed Bath,' propped it up on the stand and followed directions."

Two of Many

And the girls? Two Red Cross Volunteer Nurses' Aides—Kodak girls, who work hard eight hours a day, but still find time and energy to give a minimum of 150 hours' service a year in Rochester hospitals. They're only two of the many Kodak women who have completed the preliminary requirements and are serving however and wherever they may be of most use. Some thirty additional girls are now in training.



Nurses'-Aide Fern Schwan, of Hawk-Eye, checks herself "in"—all set for an evening's duty



"Mrs. Chase"—known to student nurses and aides in every hospital—gets the undivided attention of Aides Helen Steinfeldt, Kodak Park; Gwen Wolfe, Kodak Office; and Theresa Liess, Camera Works

The training? It is an 80-hour 10-weeks' course. Thirty-five hours are spent in classroom instruction; along with 45 hours of actual practice work in a hospital, under close and careful supervision. After that, the aides give at least 150 hours' service a year—about a three-hour evening each week, the year around. The course is standardized throughout the United States, so that it is possible for an aide to transfer to another city and still carry on.

The purpose of the aides course is, "To train a corps of women to serve as volunteer aides to nurses in hospitals, clinics, and health organizations, as a contribution to the community, and to relieve more nurses for the armed forces." The aides also relieve nurses of many routine but time-consuming duties.

Aides chart TPR's (temperature, pulse, respiration to us), give baths, give morning and evening care, make up beds with and without patients in them, clean units and prepare them for new patients, feed patients, give trays, and help in hospital kitchens. They never supplant the services of the nurses, but rather supplement them.

Helping Hands

As one of the aides said, "The regular nurses are so terribly rushed these days, they simply haven't the time to spend with patients who want a little extra service, or who are lonesome and just want to talk

to someone for a few minutes. We are not encouraged to become at all familiar or personal with patients—in fact, quite the reverse—but we do have a little more time to fuss over them a bit, or to let them talk for a few minutes if we see that it really will do them good. Sometimes we can rub their backs with alcohol, shake up their pillows again, straighten their beds, rearrange flowers; any of the innumerable little things to make a sick, tired patient happier or more comfortable."

Mrs. H. C. Townson, chairman of the Nurses'-Aides Committee in Rochester, reports that Red-Cross headquarters are most appreciative of the "grand response" Kodak women have made to the appeal for aides. More girls have volunteered than can be used at the moment, and the classes for business women, scheduled to start in April, are already fully enrolled.

Valuable Training

Several of the aides to whom we talked here at Kodak were equally enthusiastic about their volunteer jobs. They feel that the training they receive is quite as valuable as the services they are able to render, and they report that the doctors, graduate nurses, and student nurses—everyone in the hospitals, in fact—are most helpful and kind. Apparently the Nurses' Aides is one of the happier solutions to a pressing war-time problem.

Grounded—but Going Strong!

YES, THEY'RE GROUNDED—but students in the Aerial Photography and Photogrammetry course of the Kodak Camera Club learn plenty about the job of surveying and mapping from the air.

Conceived with a view to offering some preinduction training in the actual use of our products in military aerial photography, the course was launched in January, 1941. Six classes, enrolling a total of more than 250 men, have been given during the past two years. The seventh started this month.

The course was planned by two Kodak Park employees, Harry W. Eustance, of the Engineering and Maintenance Department, and John R. Coleman, of the Film Emulsion Coating Department. Mr. Coleman now is a lieutenant with a map-reproduction unit of the U.S. Army.

Planned along Army training lines, the course offers instruction in the fundamentals of map reading, aerial photography, aerial-map reading and interpretation. No actual flying can be done, but students learn the technique of photography from the air for oblique views and for vertical mapping. The course deals largely, however, with the use made of the aerial photographs after they have been secured.

As an introduction to the study of aerial mapping, the reading of conventional line maps is reviewed, using the standard Government map of a local area. Reading involves recognizing features by their conventional signs, measuring distances and directions, and learning to visualize the shape of the ground from the contour lines.

Interpreting Maps

Next follow sessions in aerial-map interpretation, when the class learns to recognize features on aerial maps from the unfamiliar vertical viewpoint of the mapping camera. Photographs taken a few years apart of the same areas are compared, changed conditions noted, and, where possible, reasons for changes deduced.

Aerial photographs are customarily taken with such an overlap that succeeding prints rephotograph about half of the area covered by the preceding exposure. This allows for stereoscopic observation of the third, or vertical, dimension of the photographs. Stereoscopes have been constructed for classwork through which overlapping photographs are studied and the relief, or shape, of the land determined.

"In studying air-mapping problems, the class assumes that Monroe County



Instructor Harry W. Eustance studies an aerial photograph with the aid of a stereoscope

is to be photographed," Instructor Eustance reports. "Flight maps are prepared, the amount of film required is computed, and the flight elevation is determined. Except for the fact that all class activity must be confined to the ground, the county by this time would be thoroughly mapped by us. Since we cannot fly and take photographs for classwork, we use copies of surveys previously made of portions of the county.

"As a final problem, an aerial mosaic map is made of the same area first studied with the standard Government map. Copies of photographs have been obtained that were made in 1938 for the U.S. Department of Agriculture. These prints are carefully fitted together and pasted up to form a photographic map of the entire area."

Instructor Eustance and Assistant Instructor Ralph Sutherland refuse to promise that students will graduate from the course as expert photogrammetrists. However, if they survive the hard work required for a passing mark, they will have gained a welcome familiarity with the vital use of Kodak products. If the student goes into military service, he profits doubly from the instruction, since map- and aerial-photograph reading are required of officers and noncommissioned officers. Many graduates of the popular Camera Club course have been assigned to photographic or mapping branches of the armed forces of the United States.



An aerial mosaic map is assembled as a class practice in the Kodak Camera Club's course in Aerial Photography and Photogrammetry. Assemblers: Paul A. Kramer, left, and Charles E. Foster



Pictures of Our



Sgt. C. K. Simmons, Camera Works



Lt. H. A. Staley, Kodak Office



Pvt. J. V. Hogan, Kodak Park



Corp. H. G. Stape, Kodak Office



Lt. G. T. Behr, Camera Works



Pvt. W. J. Allen, Kodak Park



Pvt. W. J. Pickworth, Kodak Park



Pvt. J. C. Jones, Kodak Park



Donald Anderson, Minneapolis



Sgt. E. A. Pschirrer, Kodak Park



Pvt. J. Ras, Kodak Park



Pvt. A. H. Dobmeier, Kodak Park



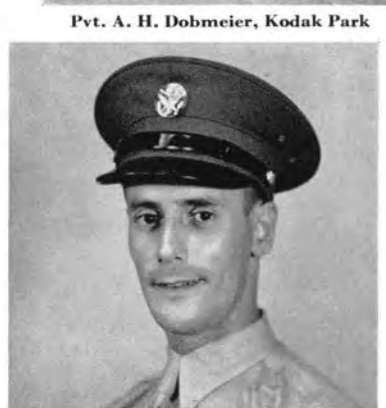
Marshall Sigford, Minneapolis



Corp. E. F. Becker, Kodak Park



Corp. J. W. Walker, San Francisco



Pvt. W. J. Hertz, Kodak Park

Men in Uniform



Sgt. D. W. Lamb, Kodak Office



Corp. H. Normandin, Minneapolis



Corp. G. Kelch, Kodak Park



Allan Herber, R.C.A.F., Minneapolis



Pvt. K. Beagley, Hawk-Eye



Lt. W. S. Hartley, Los Angeles



Pvt. K. F. Fehr, Kodak Park



Lt. C. M. Carnahan, Minneapolis



Pvt. J. T. Flanigan, Kodak Park



Richard L. Chester, Los Angeles



Pvt. W. A. VanHorn, Chicago



Corp. D. Ferguson, Kodak Park



Sgt. G. J. Hannaford, Los Angeles



Pvt. R. S. Williams, Kodak Park



Pvt. J. E. Mater, Kodak Park



Pvt. T. E. Hall, Kodak Park

Preview *Eastman Acetate Rayons Make Spring-Fashion Headlines*



In a crisp, new worsted-like weave containing Teca, Eastman crimped acetate rayon, is the suit in the new slim-hipped silhouette in the upper left. Center is a junior-size in fine Koda jersey, woven with Eastman acetate rayon and trimmed with rayon flannel that matches the narrow stripes. The jacket of the two-fabric suit on the right is another worsted-like weave containing Teca; skirt is a dull rayon Teca

crepe plus a dash of the jacket's stripe. The full-skirted young dance dress is in Koda taffeta, woven entirely of Eastman acetate rayon and printed with old-fashioned nosegays. Regency ruffles of white piqué are fresh contrast for the dark Teca-crepe—lower right—woven with Eastman crimped acetate rayon. On sale in various Rochester stores, fabrics woven with lively Teca fibers have extra built-in crush resistance

WAR DEP.
OFFICE OF THE UNDER SECRETARY
WASHINGTON, D. C.

WAR DEPARTMENT
OFFICE OF THE UNDER SECRETARY
WASHINGTON, D. C.

February 13, 1943

To the Men and Women
of the Camera Works
Eastman Kodak Company
343 State Street
Rochester, New York

To the Men and Women
of the Hawk-Eye Works
Eastman Kodak Company
Rochester, New York

WAR DEP.
OFFICE OF THE UNDER SECRETARY
WASHINGTON, D. C.

WAR DEPARTMENT
OFFICE OF THE UNDER SECRETARY
WASHINGTON, D. C.

February 13, 1943

To the Men and Women
of the Kodak Office
Eastman Kodak Company
343 State Street
Rochester, New York

To the Men and Women
of the Kodak Park Works
Eastman Kodak Company
343 State Street
Rochester, New York

I am pleased to inform you that you have won for the second time the Army-Navy Production Award for meritorious services on the production front.

I am pleased to inform you that you have won for the second time the Army-Navy Production Award for meritorious services on the production front.

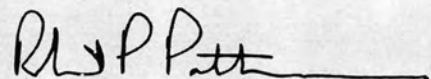
You have continued to maintain the high standard that you set for yourselves and which won you distinction more than six months ago. You may well be proud of your achievement.

You have continued to maintain the high standard that you set for yourselves and which won you distinction more than six months ago. You may well be proud of your achievement.

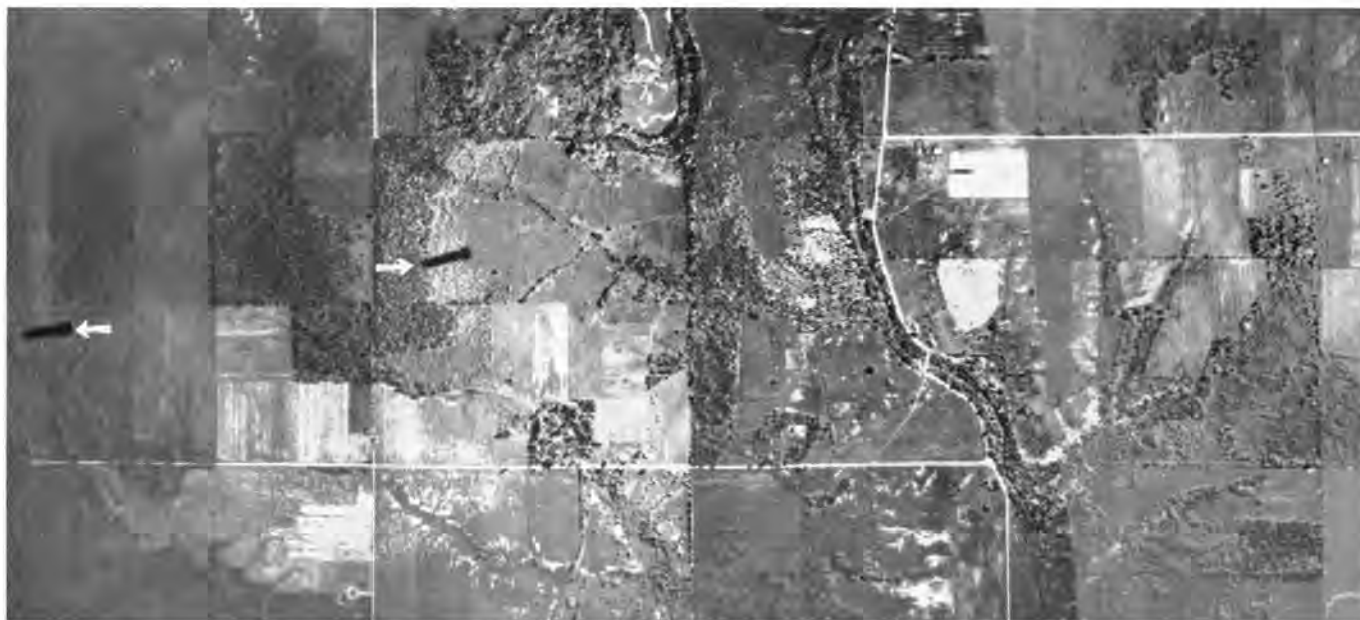
The White Star, which the renewal adds to your Army-Navy Production Award flag, is the symbol of appreciation from our Armed Forces for your continued and determined effort and patriotism.

The White Star, which the renewal adds to your Army-Navy Production Award flag, is the symbol of appreciation from our Armed Forces for your continued and determined effort and patriotism.

Sincerely yours,



Robert P. Patterson
Under Secretary of War



This aerial mosaic map is composed of five pictures taken at night by U.S. Army Air Forces, using flash bombs. Arrows indicate other bombs en route

Photography in 1942

(Continued from page 2)

developed. Portable photographic laboratories in the form of light tents, trailers, and demountable prefabricated buildings have been constructed for field work by tactical Army Air Forces photographic units.

Camera Strides

There have been quite a number of developments in aerial cameras and their accessories. Methods of controlling exposure while in flight include remote manual control and photoelectric control of the lens diaphragm. Gyroscopic mounts for completely automatic cameras have been devised so that the camera remains vertical when the airplane tilts or tips. It is merely necessary to correct for drift, which can be done by remote control from the Bombardier's compartment. Installations of aerial cameras in single-seater airplanes have been employed for low altitude, very high-speed, reconnaissance photography. Several cameras can be grouped together to secure simultaneous photographs in several directions. In connection with this high-speed work, there have been revolutionary improvements in shutter design.

Very excellent aerial color photographs have been secured with new materials at altitudes up to 30,000 feet, and the problem presented by atmospheric haze at these high alti-

tudes has been largely overcome. Such photographs should be of great value in the identification of ground detail by virtue of its color contrast, and it has also been stated that they are important for the detection of camouflage. The Air Forces and the Corps of Engineers have done much work on the photographic detection of camouflage. The methods include the use of infrared photography and other special films, and the employment of new methods of viewing and printing stereoscopic aerial photographs for securing information about the ground relief.

In September the Royal Air Force released a very detailed description of its photographic methods by which its extraordinary reconnaissance and bomb-damage photographs are made. The basic camera is the fully automatically operated F-24, which makes negatives 5 by 5 inches; but there are other cameras, the F-8 and F-52, which make bigger negatives, 8½ by 7 inches in size. Lenses range in focal length from 3½ to 40 inches, the latter for use at the ceiling altitudes which are at nearly 40,000 feet. The cameras are built on the unit principle, which permits modification for special purposes, and simplifies the problems of maintenance and repair.

One interesting adaptation for recording the effects of low-level bombing, which may be as low as 50 feet, consists in attaching a 45° mirror to the lens. The mirror is directed back-

wards under the tail of the aircraft so that a picture can be secured of the target which has just been attacked. For night photography using flash bombs, which has been standard practice with the RAF for a long time, other modifications of the camera are used. One of them uses a focal-plane shutter in which the slit is the same size as the negative. An unexposed section of the film is brought into position and the shutter uncovers it five seconds before the flash is due to explode. Five seconds after the flash, the film is wound on. An automatic control operates all the movements of film and shutter. This type is used for high-altitude photography. In the case of low-altitude night photography, a special Louvre-type shutter is used. It is opened by the control five seconds before the flash is due to explode, and is closed automatically by a photocell mechanism operated by the flash.

Rapid Processing

Various forms of processing equipment are used by the RAF. In some cases, the film is actually developed in about two minutes in a processing unit incorporated in the camera magazine. Special rapid processing is frequently done on short lengths of film in spiral developing equipment, development being completed in 1¼ minutes, and the negatives printed wet on special paper. Owing to the

large scale on which reconnaissance photography is carried out, hand processing and printing are often inadequate, and automatic machines operating somewhat in the manner of motion-picture-film processing machines are employed. All processing is highly standardized, and is carried out entirely by the time-and-temperature method. The bulk of the film used is of the fast panchromatic type, although for special purposes a somewhat slower, finer-grain film is used; and for night photography, special films of extreme speed have been developed.

On the Seas

In the Navy, photographic laboratories and equipment are provided at Naval Air Stations, and on aircraft carriers, seaplane tenders, battleships and other ships, and in other units. Aerial photography is extremely important for the Navy. . . .

Films play an extremely important part in the training of troops. In the Army Training Film program in the hands of the Signal Corps, it is a prime purpose to produce motion-picture films which will help to train fighting men as quickly and efficiently as possible. Training time is a vital matter, and it has been estimated by the Signal Corps that visual aids save 40 per cent in time. . . .

We should not fail to mention the part played by the efficient photographic units of the Federal Bureau of Investigation, for whom the war poses special problems in crime detection and the safeguarding of war-production plants. . . .

Practically the entire output of the optical plants of the country has been diverted to the use of the armed forces. For years prior to the war, in spite of contrary opinions influenced by foreign propaganda, the quality of lenses and other optical instruments made in this country was not surpassed by Germany or any other country. The experience and skill of the industry placed it in a very favorable position to make the enormous quantities of optical devices required for the war. The optical industry is now far larger than ever before, and it is making precision instruments which it had never even dreamed of in times of peace. The photographer must suffer in this good cause, for scarcely a lens is made for his use

unless he is armed with an imposing priority rating. After the war, he will undoubtedly benefit from the further knowledge that has been gained in lens computing, the new experience in manufacture, and the new types of glass which have been worked out. Special advance has been made in lenses for aerial photography. They include short-focus wide-angle lenses, very long-focus and telephoto lenses, high-aperture lenses of fairly long



These are the types of processing tanks and roll-film carrier used by the Army Air Forces

focus, and lenses of extreme precision and definition.

Camera manufacture has also suffered so far as the general photographer is concerned. But it is merely the lack of availability which affects him, for cameras of most kinds are still being made in enormous quantities for the photographically minded services. . . .

The production of sensitized goods for amateur use has been curtailed, but actually their output has been considerably increased; they are increasingly needed for Government, military, industrial, and such uses.

Last year, there was some evidence of a shortage of certain photographic chemicals, and various substitute formulas were worked out to eliminate the need for them. During the year 1942, however, the situation did not seem particularly bad and very few people turned to the new formulas. There is a shortage of a few essential chemicals, but on the whole, photographers so far seem to be fortunate. One chemical, pyro, which

was dropping out of fashion in any case, is rapidly becoming very scarce. There are, however, perfectly good substitutes for pyro developer formulas, and its lack should be of little import.

It is impossible to record all the ramifications of photography during the year. Here are a few other items of outstanding interest: Microfilming is being very extensively used for the reproduction of drawings, blueprints, documents and records, maps and charts, and for copying books and other important matter which it is desired to protect against possible danger. A life-insurance company, for instance, recently photographed 440,000 documents and shipped the films to an inland vault. Westinghouse was reported microfilming documents that go as far back as 1882, to release space for production. Records which now take 445,000 square feet for storage will need only a vault 10 feet square in film form. The score of the Shostakovich Seventh Symphony, composed in Leningrad during the siege, was photographed in Russia on microfilm and flown to this country for its first performance here. Enormous numbers of progress pictures are made to record construction and to help new manufacturers get into production on new items. X-ray photographs are made in great quantities, both for the medical examination of men for the Army, and for the inspection of metal parts to detect flaws.

In War Industries

In the war industries, photography is used for plant-protection passes and identification records; study of metals by metallography, spectrography, and ingot photography; performance records of machinery and equipment; study of stresses and vibrations; and hundreds of other purposes. Even the simple snapshot from home plays an important part in the maintenance of morale.

As the war progresses, photography is becoming a more important and more diversified tool. Its apparatus and methods are being improved and its spheres of application extended. There can be little doubt that the progress made in photography as a result of the stimulus of the war will be of much benefit to the photographer during the years of peace.

Out of the Hat



Private Richard S. Lynch



Corporal Reuben J. Lynch, Jr.



Reuben J. Lynch: he was excused

5-STAR FATHERS

REUBEN J. LYNCH, of the Kodak Office, was registered for World War I—and promptly excused. Reason: five little Lynches.

World War II finds Mr. Lynch well represented in Uncle Sam's forces: his five sons (there are also four girls in the family) are in uniform. And so is Mr. Lynch, he's a member of the Kodak Office guards.

"I'm right proud of them," says Mr. Lynch of his five stalwart sons:

Private John J., aged 26, of the Signal Corps, now in Australia;

Corporal Reuben J., Jr., 25, with the Medical Corps in Hawaii;

Corporal Frederick N., 22, at Camp Gruber, Oklahoma;

Corporal Patrick J., 20, at Camp Lee, Virginia; and

Private Richard S., 18, in the Marine Corps, at Parris Island.

"Two of my boys worked for the Company before going into service," Mr. Lynch continues. "John was in the Repair Department for about seven years before he left for the

Army in April, 1941; and he played on the Office basketball team. Reuben, who left in June of last year, worked in the Shipping Department for about two years. He was a member of the Office indoor baseball team."

Frederick left last July; and Richard, last December. They worked in a bakery together. Patrick went in December, 1941. He was with the Hickok Manufacturing Company.

Mr. Lynch has worked at Kodak for many years. He was first employed in the Shutter Assembly Department at the Camera Works.



Corporal Frederick N. Lynch



Corporal Patrick J. Lynch



Private John J. Lynch



Thomas H. White, of the Emulsion Coating Department, is very proud of his five soldier sons. "But," he says, "I had hoped that everything would be over before it came time for the twins to go."

The White twins, twenty-year-olds Donald and Douglas, left Rochester—and their jobs at Kodak Park—for active service, on January 7th. Their brothers in service are:

Robert, 24, who entered the Army in February of last year and is a corporal with a Medical Corps unit overseas;

Edwin, 27, who left Rochester last April and is a corporal, and an instructor at Camp Tyson, Tennessee; and

Norman, 21, a private, first class,





Kodak Soldier Is Model

★ ★ ★

Major C. Frank Reynolds (Kodak Park) posed by proxy for the *Post* cover by Artist Mead Schaeffer that is reproduced here. The proxy: the photograph of Major Reynolds that appears below. The major's wife, the former Jean Porter, worked at the Kodak Office



There Remains Much to be Done

GOOD EVENING, ladies and gentlemen, and especially my fellow employees in Eastman Kodak Company. In his talk last week, Mr. Hargrave said in part—"We of Kodak have given our pledge of fidelity to the task of helping . . . win this war. It is fitting . . . that we should resolve again that we . . . will honorably discharge our responsibilities. . . ."

About four and one-half months have elapsed since that memorable evening in August when my fellow employees with thunderous applause fully endorsed this pledge. Although we have gone a long way at Kodak in fulfilling this pledge, there still remains much to be done.

I have been thinking of some of the things that we who work at desks, benches, and machines can do. The first is to try even harder to see that the goods which we turn out are as perfect as we can possibly make them. Let us not lose sight of the fact that extreme care and accuracy are of the utmost importance and must not be sacrificed because all of us in the shop know that there is no

use of wasting time and material in making things that won't pass inspection.

Next to turning out good work, let us strive to be on the job full time, for every time we take a day off unnecessarily we hold back the vital weapons so sorely needed by our boys on the battle front, and in doing so we are really aiding our enemies.

This reminds me of a little story I recently read in *The Reader's Digest* about a midwestern war plant where some of the workers were in the habit of laying off on the slightest pretense. The situation became so grave that the management finally hit upon the plan of enclosing some worthless German marks in their pay envelopes with the statement that "This is a token of appreciation from Hitler for services rendered." You can well imagine that this had the desired effect.

We are all working for Uncle Sam. More personally, we are working for our relatives and our friends who are in the armed forces of this country. The only way for us to express our gratitude to those boys is to pitch in

this year and smash every record we have set up in 1942.

And how about our efforts outside the plant. Let us buy War Bonds to our fullest capacity. Every bond we buy increases the fighting strength of our boys out there.

There is another field where we can be of good use. In air-raid precautions we can do our bit in many ways to help protect property and to provide safety measures for the community.

Very soon we will be confronted by the greatest rationing system ever attempted by our government. Let us resolve to co-operate in every way possible to make it a success. These and other things we can do in 1943.

It all adds up to this—whether at our work, in our homes or sharing in community activities, the efforts of every one of us must contribute to the winning of this war. Let us therefore act in such a way that we can rightly be proud of our part in helping to establish a just and lasting peace which we know will surely follow.—*William J. Lehle, Kodak Park, on "Musical Pictures," January 1st.*

A Stern Challenge

In the year since the act of treachery at Pearl Harbor the American people have learned much about our enemy, Japan. I do not believe we have yet learned enough. I should like to report to you my own observations about the Japanese, based upon ten years of firsthand experience. I know the Japanese people and I know the Japanese military machine, that utterly ruthless machine which, like the car of Juggernaut, is riding roughshod over peaceful lands and innocent peoples—today over the lands and peoples of East Asia, tomorrow, if its power is not utterly destroyed, over the lands and peoples of our own America. For that is its definite goal and determined ambition.

The Japanese will not be defeated easily. Defeat them we shall, but only when every American understands the magnitude of the task. I have no wish to overestimate a people who are our enemies, but I must in the interests of our very survival list a few of their formidable characteristics. They are united. Theirs is a unity of solidarity. Foolish and criminally responsible as their war government is, they support it. They believe in the divinity of their Emperor, and through him, in the rightness of their war leaders. They are trained. They have submitted to years of enforced discipline.

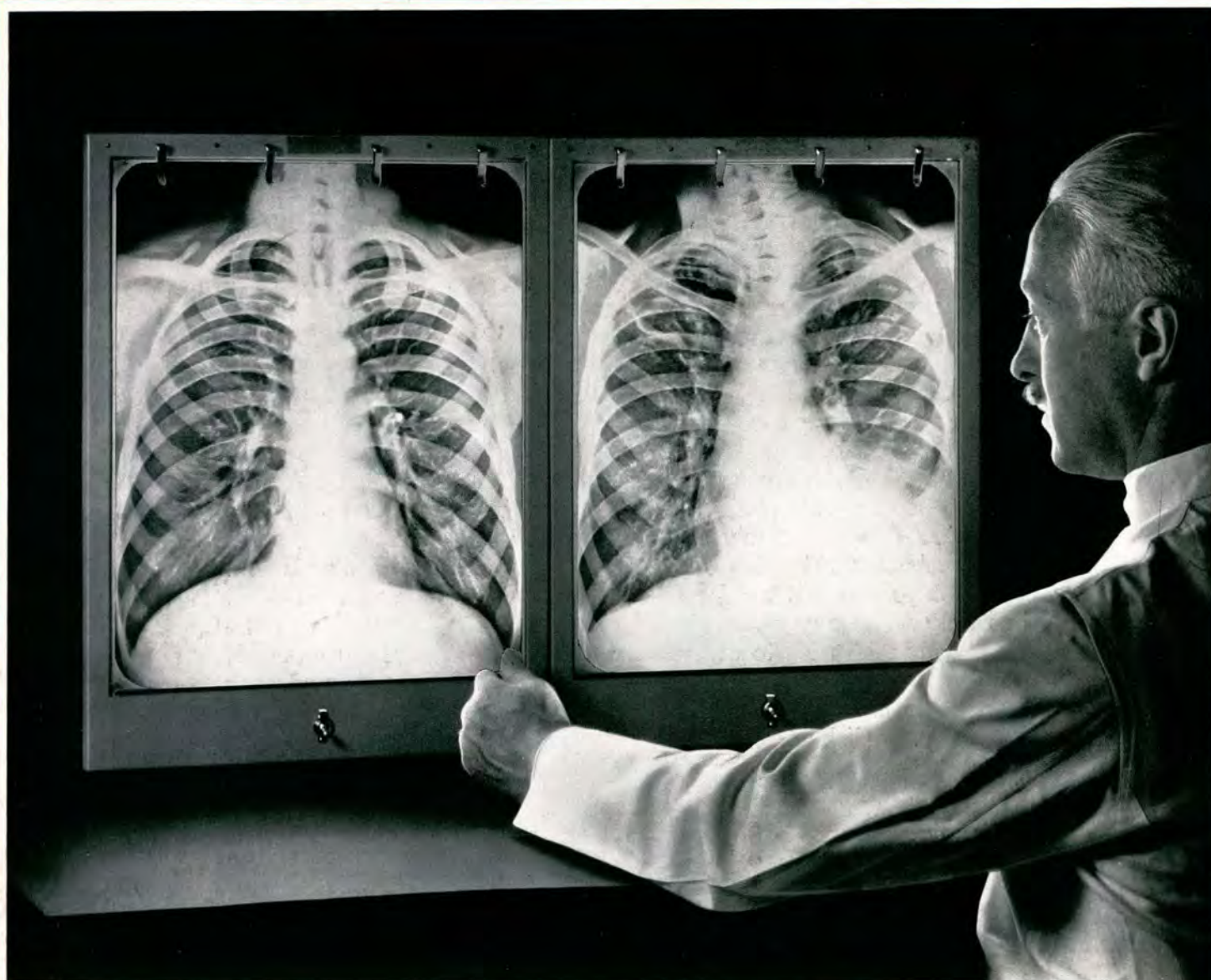
The Japanese are frugal. The empire has almost thrived on shortages, and in the midst of poverty they have built an enormous military machine. They have not done this with wastefulness. They have done it with care and thrift and economy and conserving of materials.

They are fanatical. They believe in their war, in the government which led them into it, and in their destiny of world domination.

Finally, the Japanese rely on their belief in our unwillingness to sacrifice. They have put great store in what they think to be our softness. They look upon us as weaklings, demanding our daily comforts and unwilling to make the sacrifices demanded for victory. The Japanese attached great importance to what they thought was our disunity over the war issue and they mistakenly supposed that we would be slow in developing a fighting spirit.

Japan is counting on you, on each of us, individually, to hold back and hold up the American war effort long enough for Japan to consolidate her conquests. Japan needs your hesitation, your partial effort, your doubt. It is up to every American at home to prove Japan wrong. Our gallant soldiers in New Guinea and Guadalcanal are already proving Japan's mistaken judgment.

—*From a recent radio address by our former Ambassador to Tokyo, Joseph C. Grew.*



INSIDE VIEW OF A HEALTHY SOLDIER . . . This X-ray picture in minute detail shows Army physicians that his lungs are sound—free from tuberculous infection. It was made on Kodak X-ray Film in "the greatest tuberculosis hunt of all time."

REJECTED . . . serious tuberculous infection. Not only is a man unfit to fight kept out of the Army—for the first time, perhaps, he learns of his condition, and begins his own campaign against another enemy which can be conquered.

Kodak X-ray Film helps guard our armed forces against Tuberculosis

EVEN WAR has its bright and hopeful side—even this war of frightfulness. It is bringing the surest, most conclusive test for tuberculosis to millions of young Americans. As a matter of standard practice, those volunteering or called under Selective Service are radiographed—pictures of their lungs are made on X-ray film.

This alertness and determination on the part of Army physicians to keep the Army free from tuberculosis are

also performing an invaluable service for those found to be infected. For tuberculosis, with timely measures, can be cured. But frequently it does not give a warning of its presence, without a radiograph.

THIS is the greatest X-ray job since Kodak introduced flexible X-ray film, to replace cumbersome plates, in 1914.

It prophesies the not-too-distant time when X-ray will make possible the examination of all our people—as hundreds of thousands of industrial employees have been examined, as a matter of routine, for years.

A good deal has been accomplished. X-ray pictures have already been a major factor in beating tuberculosis down from first place to seventh, as a hazard of life . . . Eastman Kodak Company, Rochester, N. Y.

Serving human progress through Photography