

ARMY AIR FORCES NAVIGATION SCHOOL SAN MARCOS ARMY AIR FIELD

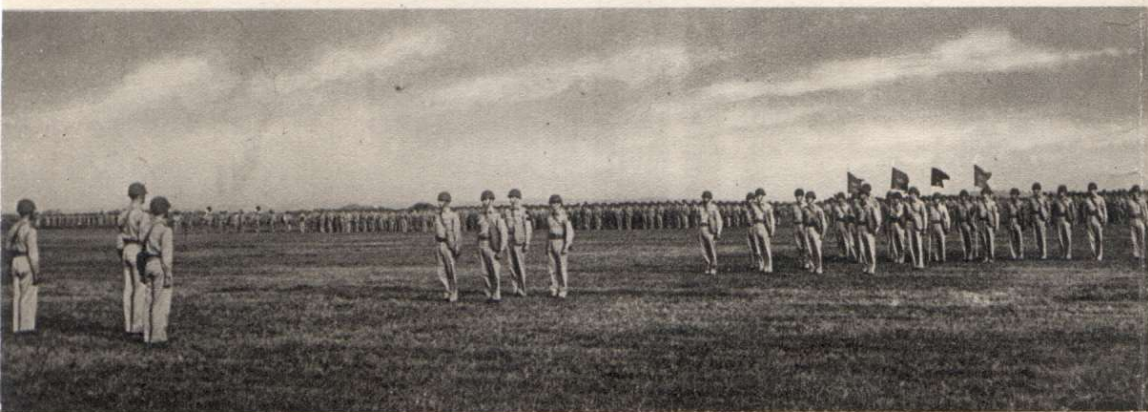


A PICTURE BOOK OF THE FIELD AND ITS ACTIVITIES



Official cadet flag of SMAAF.

Cadet and squadron commanders report to their Commanding Officer before formal review of cadets and enlisted men.



History of San Marcos Army Air Field

THE ROAR of powerful aircraft engines over San Marcos Army Air Field is more than the steady drone of fleet, silver-winged training ships. It's the ominous thunder of things to come—when San Marcos-trained aerial navigators guide America's powerful new air fleets into limitless horizons to hit the enemy wherever he is.

For San Marcos Army Air Field, one of the Air Forces' three largest navigation schools, is producing the sharp-witted young men who will direct the lightning weapon of air power when it strikes the Axis again and again.

Located five miles from the pretty college town of San Marcos in the rolling hills of Southwest Texas, SMAAF is the home field of hundreds of navigators now plotting courses over the aerial battlefields of the world.

The city of San Marcos, located in the scenic and colorful section of Texas made famous by Spanish and French legends, is a farming and education center. Southwest Texas State Teachers College and San Marcos Academy for boys are both located there, and the city is known all over the Southwest for its fine climate and verdant surroundings.

From all over America, hundreds of the nation's finest young men come to San Marcos from pre-flight and other training schools to learn the sharp science of aerial navigation. From San Marcos, they go out equipped with the mental might that will guide great battleships of the air over Axisdom to the kill, then bring those proud ships homeward safely.

Early in its history the Army Air Forces Navigation School at San Marcos, chalked up one of the outstanding records in the nation's war effort when it graduated its first class of skilled aerial navigators in less than a year after construction of the field was started.

A War Department directive to acquire the site for the school was issued in May, 1942, but it was not until late in June that the first construction got under way with the beginning of work on streets and culverts. Captain U. E. Hubble of the Corps of Engineers had arrived earlier in the month to supervise the construction.

Only a few days less than a year after the ground was broken for the streets, the first class of navigators was graduated on June 24, 1943. With this record to mark its first year, the school continues to funnel a new class of skilled aerial navigators into the Allied war effort every three weeks.

Site for the school—several hundred acres of good black Central Texas farmland—was purchased by the City of San Marcos with the proceeds of a \$100,000 bond issue and presented to the government. The site encompassed several farms and homes and barns and fields of corn and cotton had to make way for the new Air Forces establishment.

Contracts for the major construction work, totaling in excess of \$5,000,000, were let late in July. Erection of administrative buildings, classrooms, barracks, hangars, mess halls and recreational buildings went forward speedily. In September Lt. Col.

J. B. Olson, projects officer, arrived to assume general charge of the field until its completion.

The flag was raised at the field for the first time on November 25, signifying that the Army had moved in and was about ready to take over the establishment. Lt. Col. J. M. Hutchison, new commanding officer of the field, presided at the ceremonies.

Activation of the field took place on December 15 when Colonel Hutchison formally accepted the post and administrative functions from Major Hubble of the Corps of Engineers. Major Hubble presented a key to the post to Colonel Hutchison to symbolize the transfer of jurisdiction from the Engineers to the Air Forces. Members of Colonel Hutchison's staff who participated in the ceremony were: Lt. Col. William B. Wimer, executive officer; Major William K. St. Claire, post adjutant; Capt. William D. Doughty, Jr., provost marshal, and Lieut. Henry K. Orgain, post engineer.

Construction work continued and officer and enlisted personnel to administer and operate the field and school activities kept pouring in until in late February the establishment had reached the point at which it could begin the work for which it had been created, the training of aerial navigators. The first class of cadets arrived on February 22 and each three weeks since, another has arrived to spend 18 weeks in the intensive military, athletic, academic and practical navigation training necessary to produce the skilled aerial navigator the AAF must have to fulfill its mission of carrying the attack to the enemy wherever he may be found.

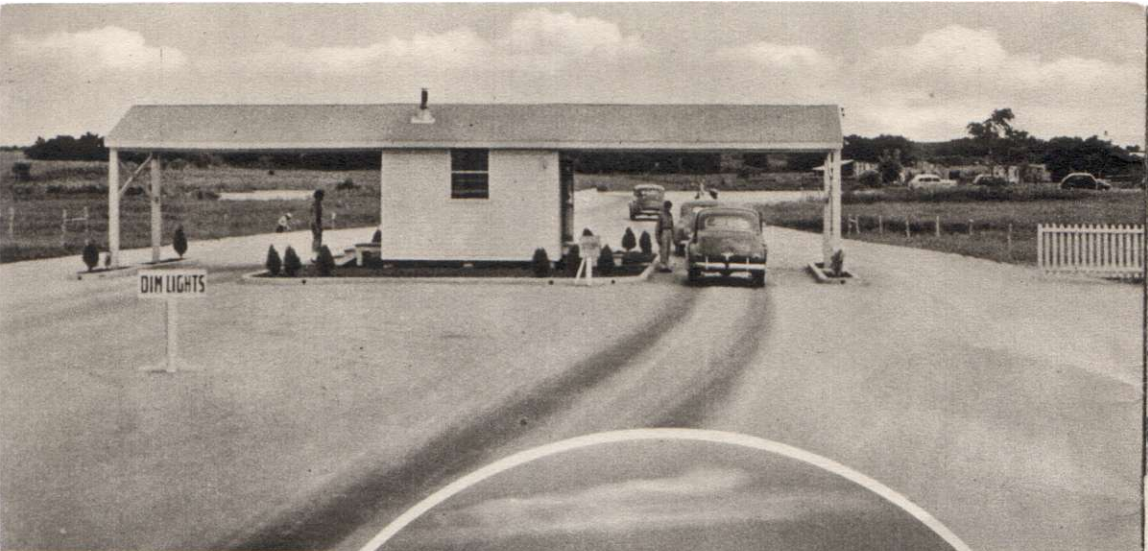
The role of the navigator in modern aerial warfare is a vital one—and growing more and more important as the air offensive of the United Nations mounts in intensity. It is the responsibility of the navigator to tell a bomber pilot how to rendezvous with other bombers at a point 15,000 feet above the Mediterranean, say, and then to direct him several hundred miles to a target somewhere in Hitler's Fortress Europe and back to base again.

During his 18 weeks at the school, the cadet is taught four methods of navigation: Radio, pilotage, dead reckoning and celestial.

The navigator relies most heavily on celestial navigation. To aid him in guiding his plane he is armed with a sextant, a Mercator chart, a Weem's plotter, a computer, a pair of dividers, an air almanac, a book of tables, scrap paper, log book and pencil. With these he plots his course through the trackless skies over oceans, mountains, or deserts to enable his plane to fulfill its mission—blasting an Axis establishment into oblivion.

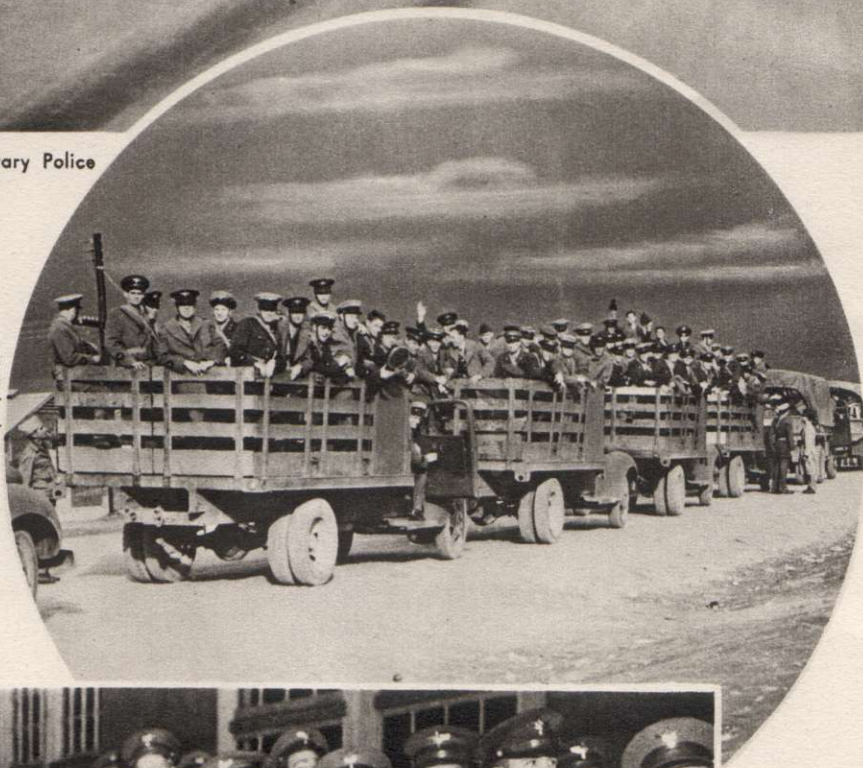
"The world's most exacting scientists are the Army Air Forces' navigators," said Major General Gerald C. Brant, commanding general of the Gulf Coast Training Center.

And because of the exact science of aerial navigation that Air Forces' navigation students are learning at San Marcos Army Air Field, and with San Marcos-trained navigators finding the way, the Axis partners are going to find plenty of things to regret.



Main gate and Military Police outpost.

Out with the primary,
on with advanced!
Cadets arrive at
SMAAF for final training
before commissions and wings.



More cadets, and
soon more navigators
for America's
bombers.





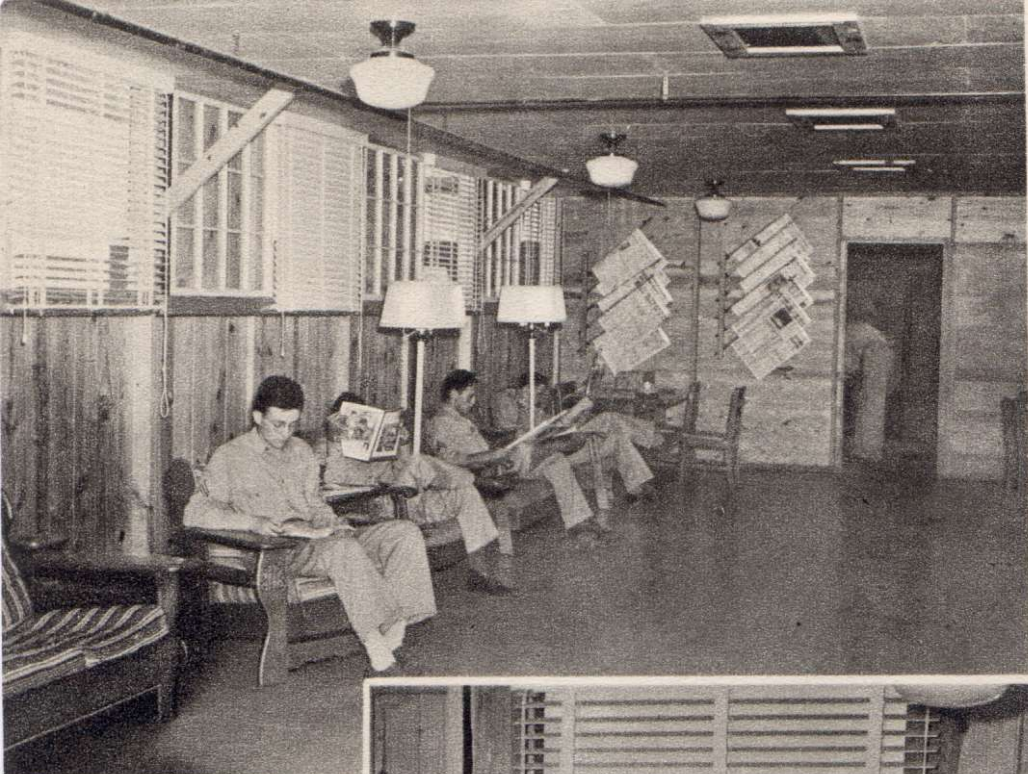
Cadets and enlisted men pass in review before their Commanding Officer and visiting Officers.

Major E. J. Ingram, Inspector General's department, inspects the troops of SMAAF.



All out for San Marcos and 18 weeks of training. Cadets arriving at SMAAF.



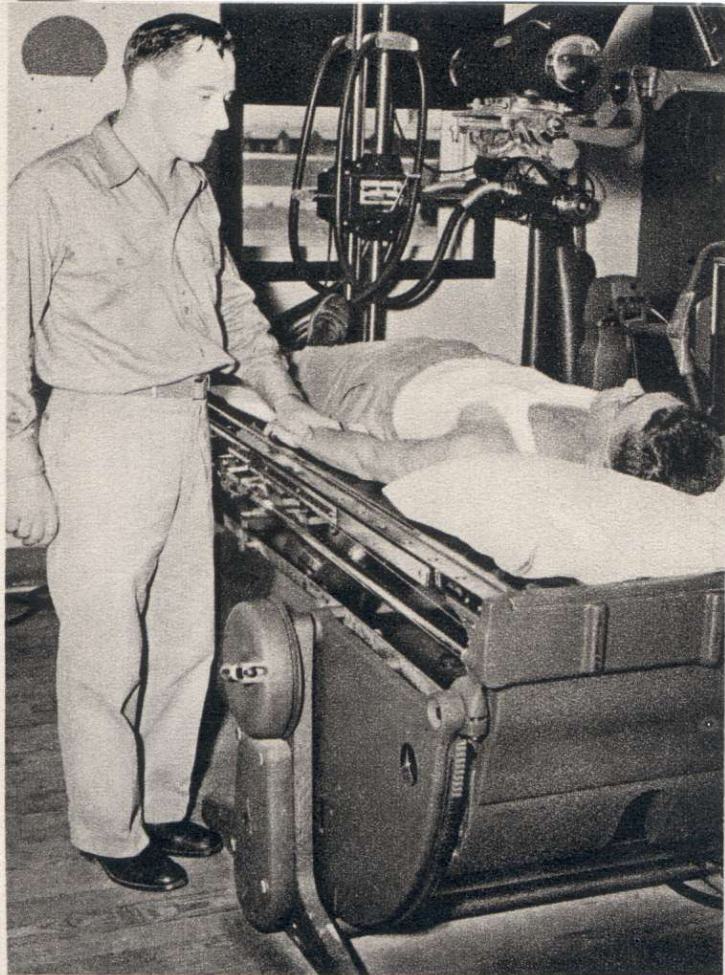


Soldiers relax in the post library and catch up on their newspaper and magazine reading.



Thousands of books in the Post Library give every soldier a chance to read for entertainment or study.

X-ray equipment, Station Hospital.



Main entrance, Station Hospital. Here the finest equipment and best medical care assures every man of the best attention possible for any and all ills.





Cadet mess. No food wastage here—those plates are left spotless!

Manners are included in a cadet's curriculum. No one sits down to eat until his mess mates arrive.



Officers aren't immune from gas alerts, either.



Hard days of training fade a lot under the cooling spray of a shower.

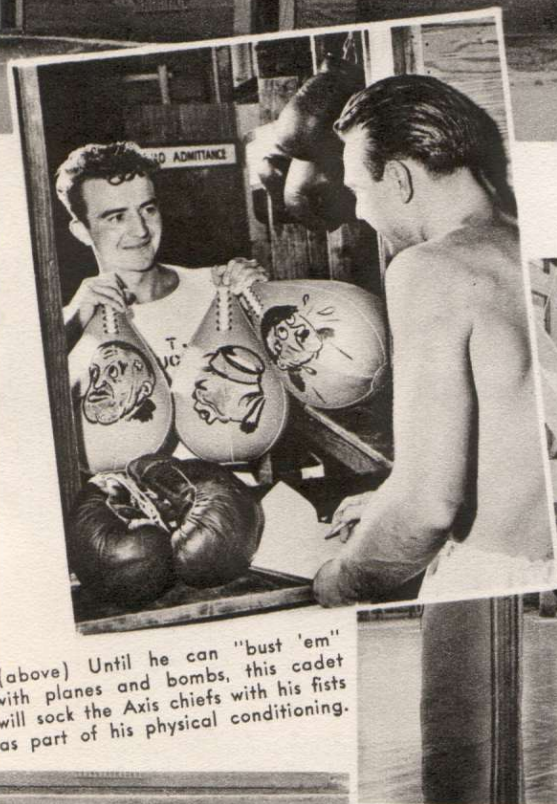
Air raid alert? No sir, it's open post for the week end and dress as you go.



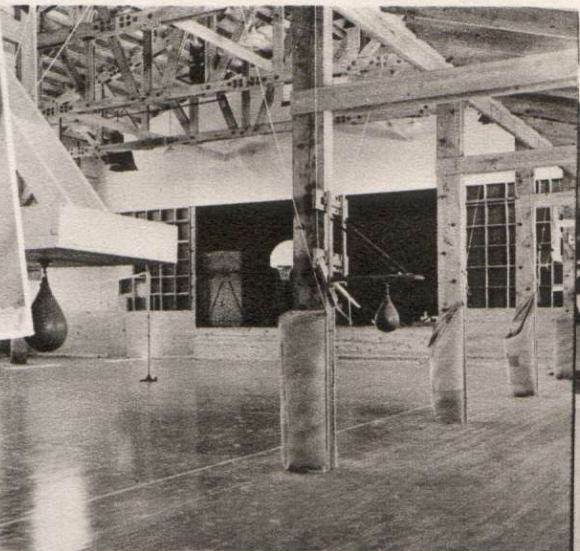
A cadet gets his rest where he finds it and the search usually ends at his bunk, even if it lasts only ten minutes between classes.



Field gymnasium, where muscles ache, but grow.



(above) Until he can "bust 'em" with planes and bombs, this cadet will sock the Axis chiefs with his fists as part of his physical conditioning.



Craig Hall, the gymnasium, ready for workouts in six sports.



Cadets at calisthenics. They get hours of it at SMAAF to prepare for long, straining hours in the air.



One of the Post chapels at San Marcos Army Air Field.



Almost like home . . . a corner of the dayroom. Writing table and radio.

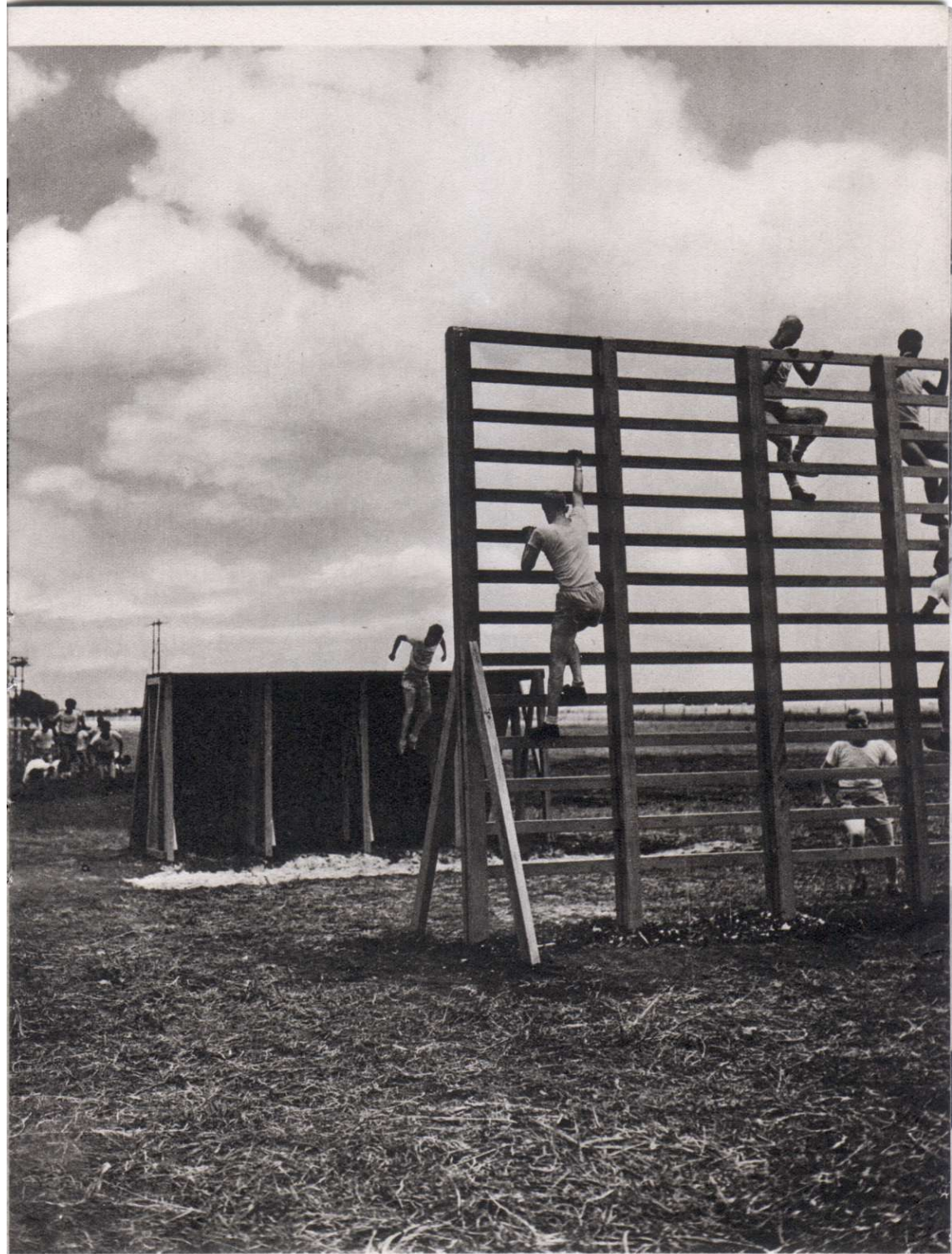
One of the favorite GI sports is pool. Every dayroom has a pool table.



From soap to jewelry, the PX runs the gamut from necessities to luxuries.



Popular spot at any field. The post cafeteria and soda fountain.



The obstacle course, where sore muscles and barked shins are grown.



Link trainer class with instructor-operators and controls at left.



Link trainer—the plane that flies without leaving the classroom floor.

With drift meter and compass, he checks his "plane's" flight.



By radio a cadet checks his bearings, computed during a classroom solution of a mythical flight.

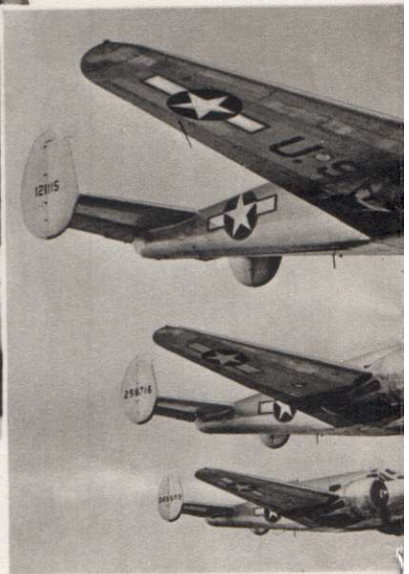
To simulate the navigation of a plane, this training gadget aids instructors in explaining the use of the compasses.



... Into the Wild



In planes such as this one the Army Air Forces Navigation School at San Marcos, Texas, is training and graduating a class of navigation cadets every three weeks. By guiding these planes on training flights cadets learn to navigate Flying Fortresses and other bombers on combat missions.



In close formation, three train a training mission.



An unusual camera angle makes the propellers of this training plane appear almost motionless as it banks among the clouds over the Field.



This formation gains altitude for

Old Blue Yonder



Training planes wing their way on



High over the Texas plains a navigation trainer banks for a turn. Especially adapted to long training flights, these planes are used at San Marcos.



a difficult problem in navigation.



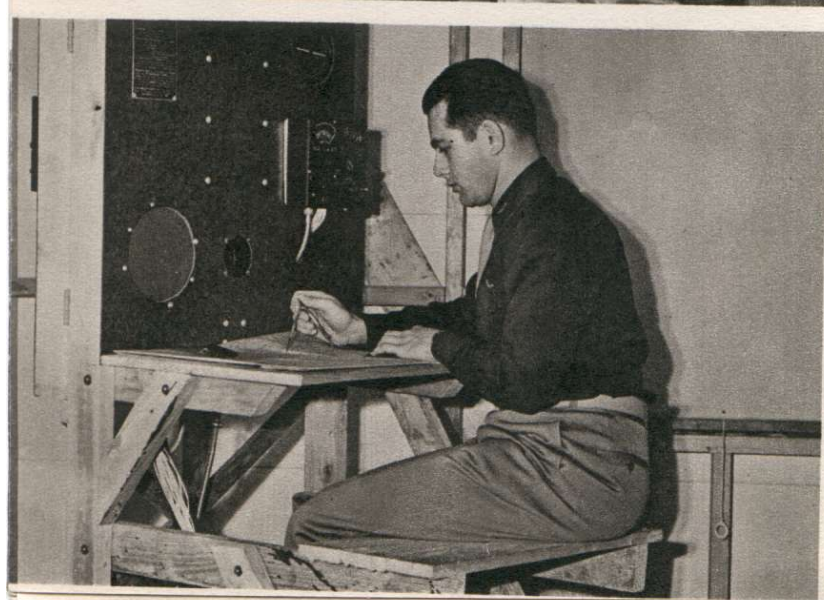
Homeward bound! Back from a long training flight, this training ship nears the completion of a "mission," guided by navigation cadets learning to chart the courses for America's heavyweight bombers. In ships like these the Army Air Forces Navigation School at San Marcos teaches aerial navigation to America's young airmen.



Instructor teaches the theories of navigation mapmaking.



Navigator, bombardier or pilot, Uncle Sam's plane crewmen must know and recognize enemy or ally in the air. Cadets take a lesson in plane identification.



An officer student receives his bearings by radio and checks his course on flight map.

Instructor's desk serves as an after-class conference on the right and wrong answers of the day.



The principle of the sextant is explained to a cadet by instructor. The books and the charts are all tools of the navigation student.



With drift meter and compass, navigators get their lessons with the aid of this improvised training gadget.



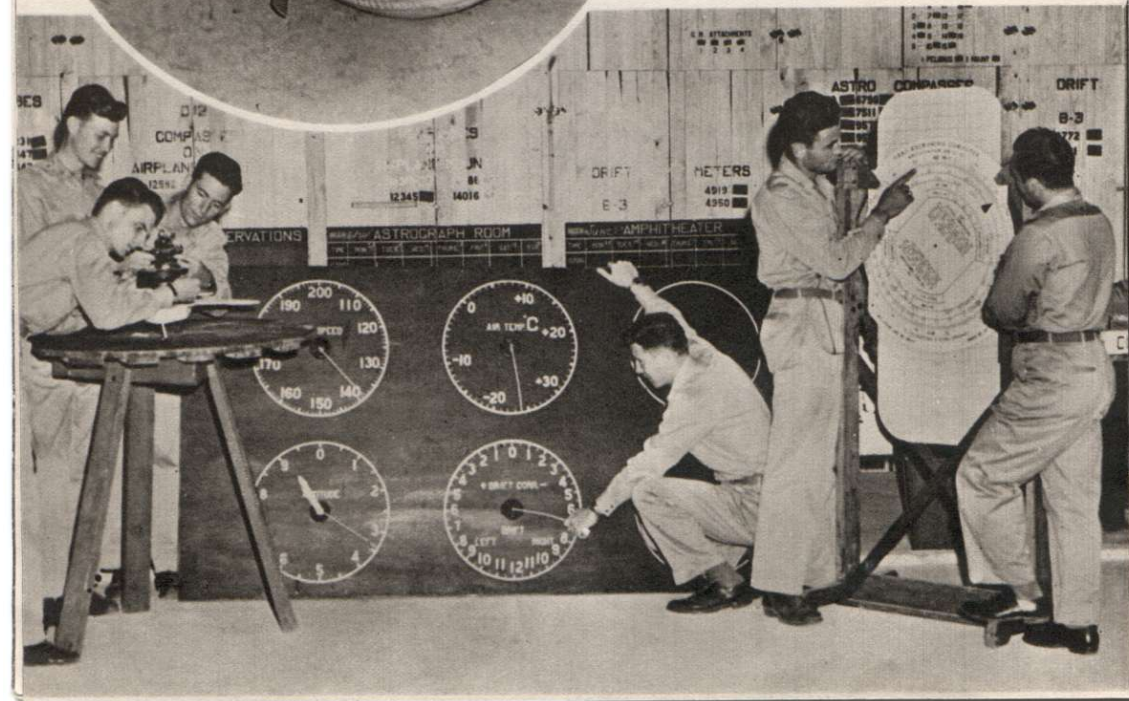


A class of navigators get their instructions for a hypothetical course via radio, from an instructor a few feet away.



Classroom floor serves as the "sea" for instruction on maneuvering a life raft. A model "rescue" plane flies overhead to lend realism.

Classroom problem in navigation.





"Here's the spot, you get us there," an instructor tells a student crew, and the computing will decide their grade.

In the misty hours of dawn an instructor and his navigation crew head for their plane and the day's problem.





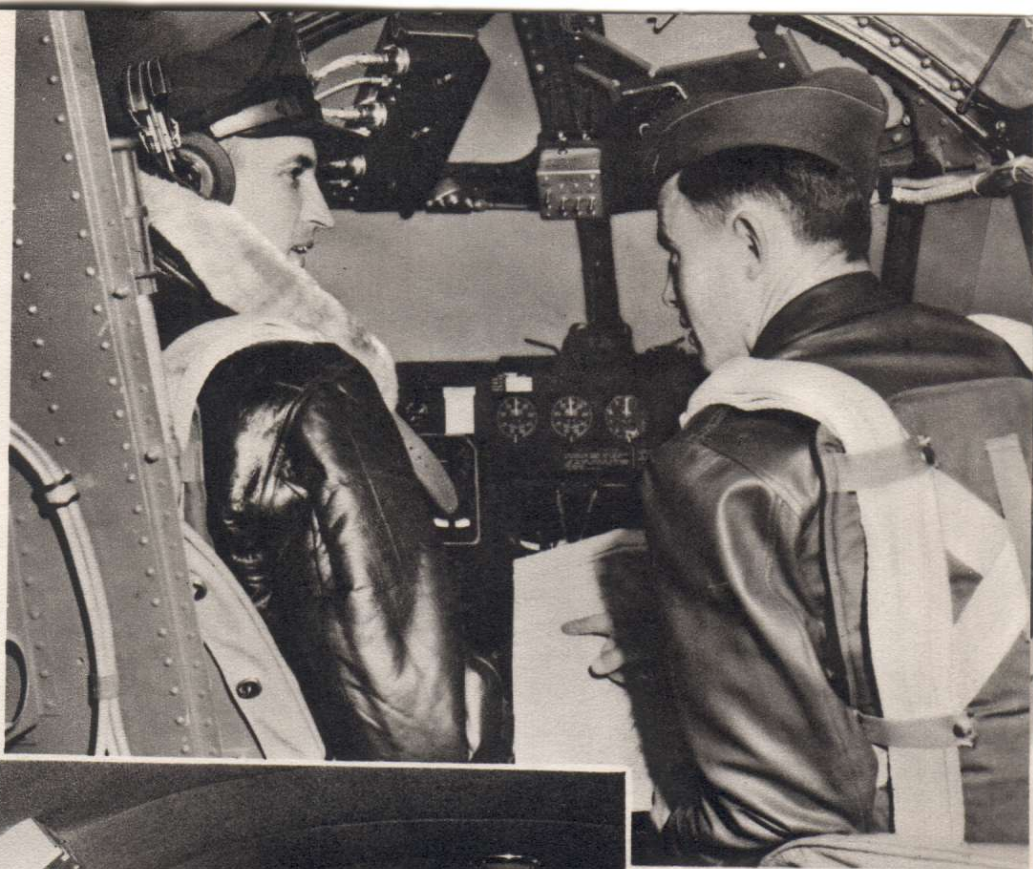
Instructors and cadets synchronize their watches before a training flight.

The drift meter is "right hand" aide of the navigator. One of the most essential tools of his trade.



In flight the navigator has at his fingertips all the tools to do the job.





Pilot and student become a team in the air, as shown by this cadet, seeking the advice of his pilot instructor.



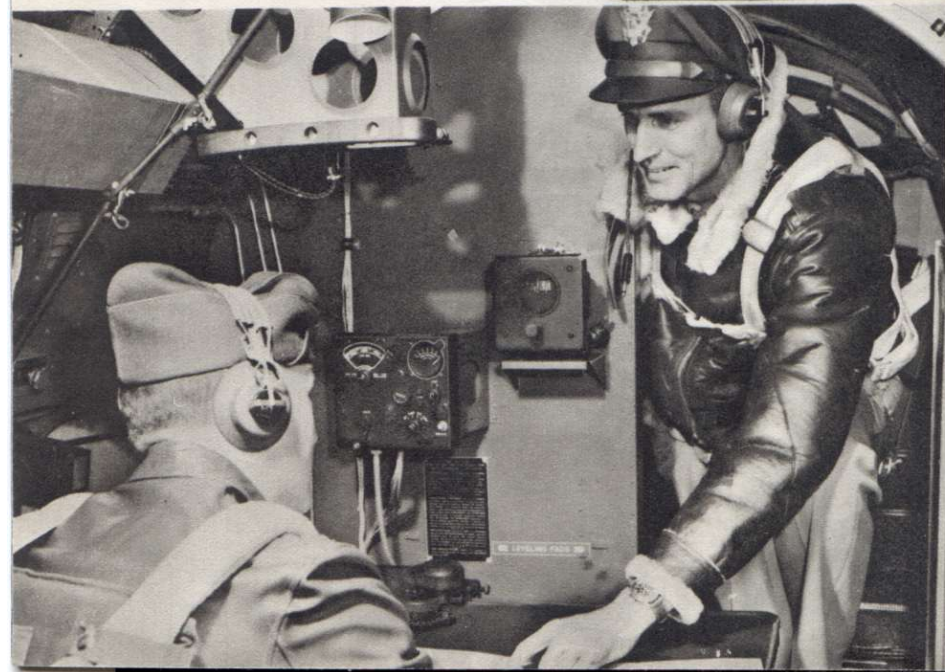
"Navigator to pilot . . ." By radio-
phone the navigator calls changes
in the plane's course to the pilot.

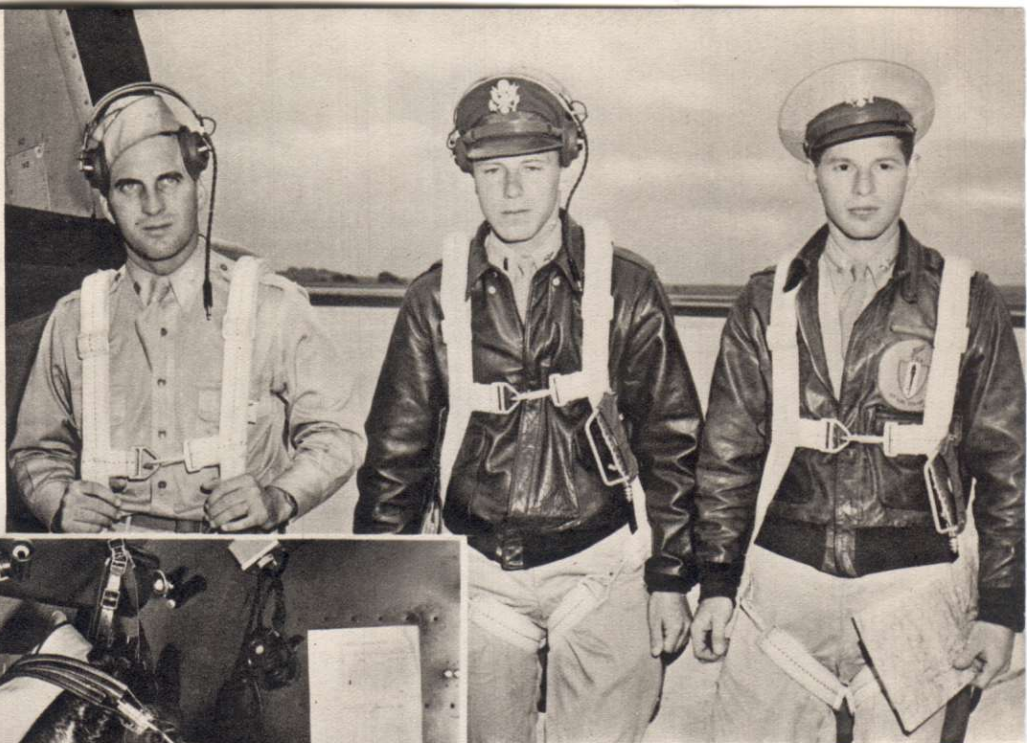


Two cadets aboard a training plane discuss a problem in navigation.

At his plotting board, a cadet navigator checks his course on a training plane. Oxygen mask and fur-lined coat keep him comfortable at high altitudes.

In flight or on the ground, the instructor stands ready to explain to or correct the cadet navigator in training problems.





Cadet, instructor and pilot, ready for a training flight.



A student officer uses the drift meter.

Pilot and navigation instructor disembark after a training flight.



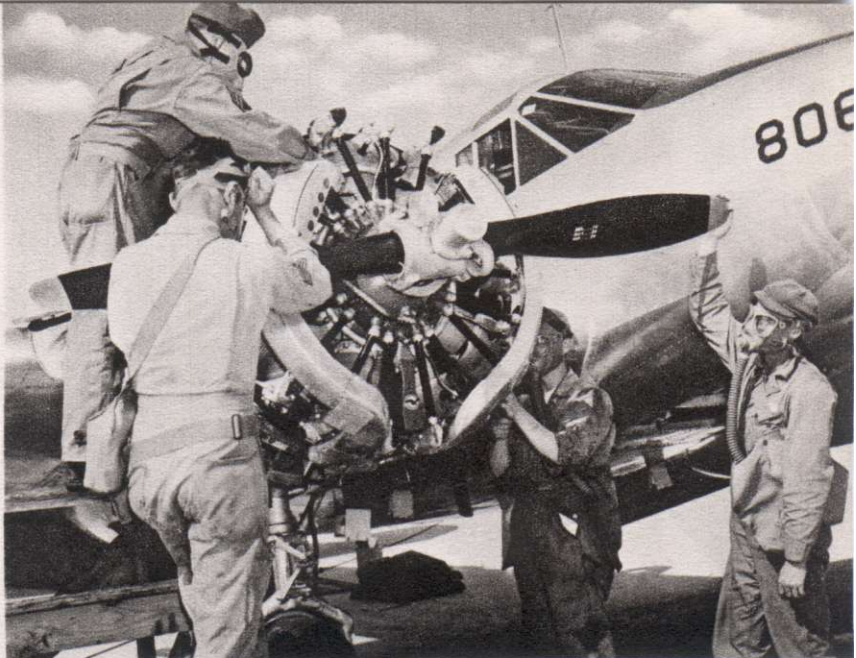


In flight an instructing officer explains a point in navigation. No room for errors here—a fraction off the route may send you miles from your destination.

A typical navigation cadet—alert, confident, and anxious to do his job as part of the U. S.' pilot, bombardier and navigator team.

An instructor explains a navigation problem to his cadet crew before taking off on a training flight.





Motor tuneups go on despite a gas alert that puts masks over the faces of a mechanical crew servicing a trainer.



To insure the safety of the men who fly, ground crewmen check every working part of training planes. A technician using a test meter to check a plane's radio system.



Enlisted technicians, such as this radio expert here checking a plane's radio system, keep training planes in efficient order.



Three new members of the "Caterpillar club" thank the girls who folded their chutes. Forced to bail out, these three cadets parachuted to safety.



Enlisted men drawing a bead on the pistol targets.



An officer tries his eye on the pistol range.

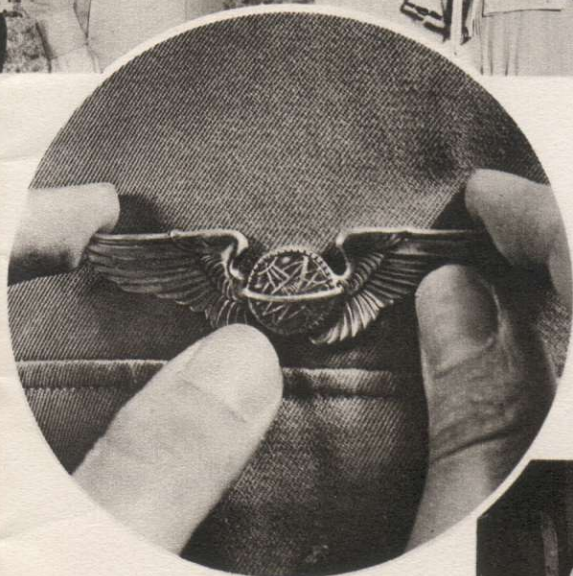


(left) A proud mother and sister admire new silver wings on graduation day.



Another thrill that goes with being a successful cadet—getting fitted for an officer's blouse just before graduation.

For San Marcos' first graduating class, the chef cooked up this anniversary culinary job, but the kitchen wolves never let it get out of the kitchen.



The mark of a navigator—proudly worn by San Marcos graduates.



"The Day" for every cadet comes when he can have his mother, wife or girl friend pin on those silver wings. The job is in good hands for this new lieutenant.



SMAAF's first class wrote its farewell with the silver wings, awarded on graduation day.



The Post Theater.

Intrasquadron basketball game
at Craig Hall.



Officers and their ladies, like GI's
and their gals, like that Saturday
night dance, such as this one at
SMAAF's new officer's club.





Enlisted men and their girls dance at the Service Club.

(below) Civilians call 'em "rug cutters," but the Air Corps calls them "wood choppers" because the Army doesn't have rugs. A couple of Jivers at a GI dance.



The SMAAF orchestra, swing or sweet, they furnish the music for all field dances.



"Careless Hill"—mock graves that remind SMAAF personnel that carelessness costs lives and money.





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