SUPRA ET ULTRA

2

THE NATIONAL RECONNAISSANCE OFFICE PRESENTS:

APPROVED BY THE ESPIONAGE CODE AUTHORITY

THE NRO STORY

FEATURING:

THE STAR CATCHERS

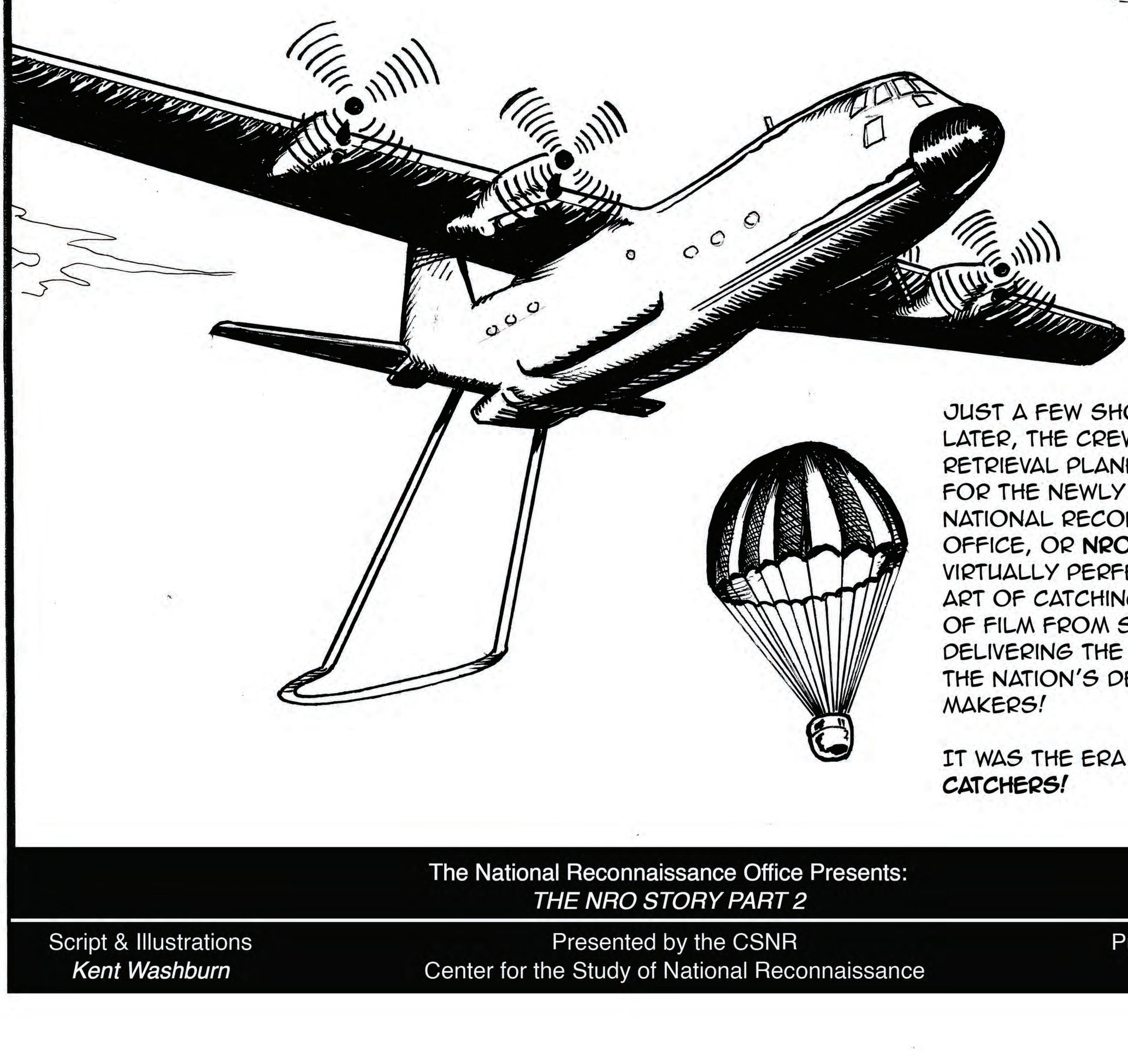
THE SR-71

THE SPACE SHUTTLE

AND MORE!

THE FIRST BUCKET OF FILM CONTAINING CRITICAL IMAGES OF U.S.S.R TERRITORY WAS DROPPED TO EARTH IN 1960 BY THE SPY SATELLITE "**CORONA**" AND CAUGHT BY A WAITING RETRIEVAL PLANE!

STAR CATCHERS



JUST A FEW SHORT YEARS LATER, THE CREWS OF THESE RETRIEVAL PLANES, WORKING FOR THE NEWLY FOUNDED NATIONAL RECONNAISSANCE OFFICE, OR **NRO**, HAD VIRTUALLY PERFECTED THE ART OF CATCHING BUCKETS OF FILM FROM SPACE AND DELIVERING THE IMAGES TO THE NATION'S DECISION MAKERS!

IT WAS THE ERA OF THE **STAR CATCHERS!**

The National Reconnaissance Office Presents:
THE NRO STORY PART 2

Script & Illustrations
Kent Washburn

Presented by the CSNR
Center for the Study of National Reconnaissance

Published by the
NRO

THE NATION'S TOP SECRET SPACE BUCKET RETRIEVAL SQUAD, THE 6594TH TEST GROUP OUT OF HICKAM AIR FORCE BASE, HAWAII, WAS NICKNAMED THE "**STAR CATCHERS.**" IT WAS AN ELITE ASSIGNMENT TO PILOT OR CREW A JC-130 PLANE!

WELCOME TO THE STAR CATCHERS, BOB!

GREAT TO BE HERE!

GREAT TO HAVE YOU! JUST STAY ALERT - YOU'LL BE OVER 20,000 FEET UP WITH THE BACK HATCH WIDE OPEN!

ONCE CORONA FILM HAD BEEN DROPPED FROM SPACE AND THE DESCENDING PARACHUTE HAD BEEN SNAGGED,

IT WAS UP TO THE CREW OPERATING THE WINCH TO HAUL IN THE BUCKET!

THE STAR CATCHERS HAD AN OUTSTANDING RECORD OF MAKING **SUCCESSFUL CATCHES**, BUT THE JOB COULD STILL BE DANGEROUS...

KEEP CRANKING, SHE'S COMING IN!

THE CABLE IS ACTING KIND OF WILD THOUGH, WATCH -

HEY!! MY FOOT!!

HELP!!

BOB!! ARE YOU OKAY??

I'M OKAY!

WHEN I GRABBED THE ACTUATOR TO KEEP MYSELF FROM FLYING OUT, THE CABLE CAME OFF! THIS ONE WAS, IT'S, UM...

TODAY HAS BEEN...

...KIND OF TOUGH DAY AT THE OFFICE!

ANOTHER PART OF THE SATELLITE SUPPORT FOR **CORONA** BROUGHT THE **NRO** INTO THE WORLD OF...

TOP SECRET WEATHER!

ORBITING AHEAD OF THE **CORONA** SATELLITE, TOP SECRET "**DMSP**" DEFENSE METEOROLOGICAL SATELLITE PROGRAM SATS SCOUTED FOR BREAKS IN CLOUD COVER.

KAZAKHSTAN VISIBILITY CLEAR.

ROGER THAT. **CORONA** SET TO GATHER SOME PHOTOS ON THE NEXT PASS.

AND IF NORMAL U.S. WEATHER SATELLITES WERE EVER OUT OF COMMISSION,

LET'S SEE... I HAVEN'T USED THIS PAY PHONE BEFORE...

HELLO, **NATIONAL HURRICANE CENTER** MIAMI!

THIS IS A STAR MESSAGE!

TELEP

DMSP SATS CAME TO THE RESCUE!

STAR MESSAGE?

IS IT THAT VOICE AGAIN?

SHHH!

HURRICANE DEVELOPING AT 27 DEGREES NORTH, MINUS 63 WEST. THAT'S 27 DEGREES NORTH, MINUS 63 WEST [CLICK]

WHO IS THIS GUY?

I DON'T KNOW, BUT HE...THEY... HAVEN'T BEEN WRONG YET!

GET SOME HURRICANE HUNTER PLANES OUT THERE! WE NEED TO CHECK OUT THESE COORDINATES, AND I BET THEY'LL BE ON THE MONEY... **AGAIN!**

AS LONG AS MY ROLL OF DIMES HOLDS OUT AND I DON'T USE THE SAME PHONE BOOTH TWICE,

NO **HURRICANE** IS GOING TO TAKE US BY SURPRISE!

IT WAS TOP SECRET WEATHER INTELLIGENCE SHARING - **1960S STYLE!**

BUT RECONNAISSANCE FROM ABOVE WASN'T LIMITED TO SATELLITES! IN 1962, THE **NRO** ESTABLISHED

PROGRAM D

SPY PLANES

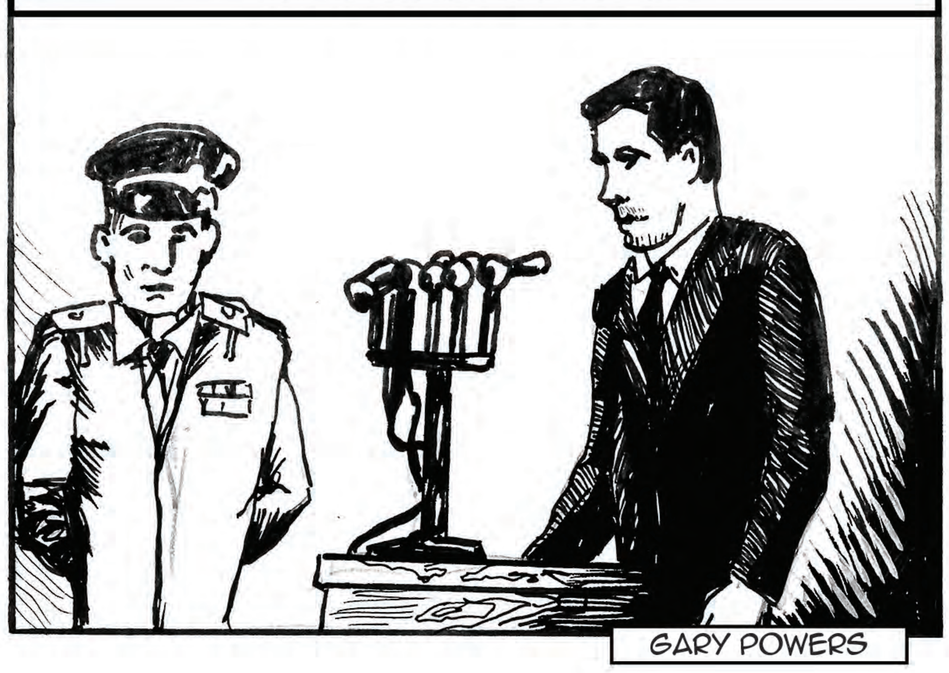
ALSO KNOWN AS "**AIRCRAFT PROJECTS**," WHICH OVERSAW THE ACQUISITION AND DEVELOPMENT OF SOME FAMOUS SPY AIRCRAFT.

THE **CIA'S U-2 SPYPLANE** FIRST WENT INTO SERVICE IN 1955, PERFORMING ADMIRABLY UNTIL ONE WAS SHOT DOWN IN 1960!

CIA

U-2

THE SHOOTDOWN MADE THE **U-2** FAMOUS, AS DID THE TRIAL OF ITS PILOT **GARY POWERS**. BUT WHAT THE WORLD DID NOT KNOW WAS THAT LOCKHEED MARTIN'S "**SKUNK WORKS**" FACTORY, THE SAME FACILITY THAT CREATED THE **U-2**, WAS ABOUT TO ROLL OUT SOME NEW TOP SECRET SUPERSONIC SPY PLANES SO ADVANCED THEY SEEMED LIKE SCIENCE FICTION: THE **A-12** AND THE **SR-71**!

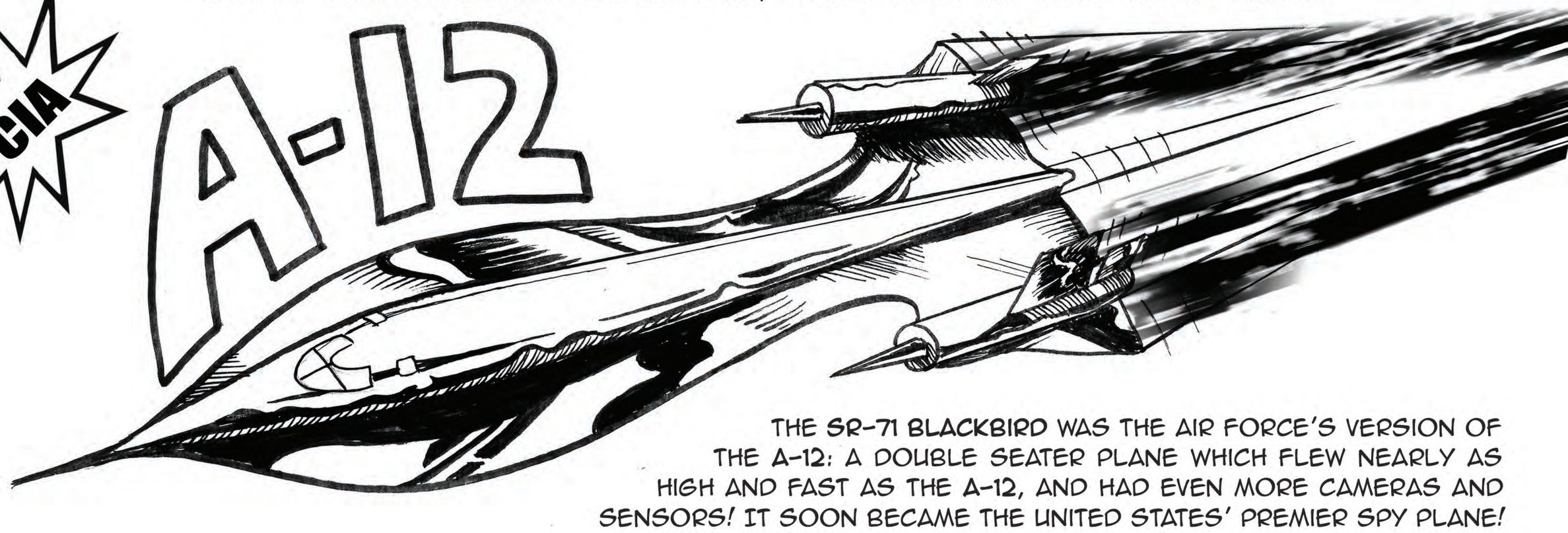


GARY POWERS

THE **CIA'S A-12** WAS A SINGLE SEAT PLANE CODENAMED "**OXCART**" WHICH FLEW FAR HIGHER AND 3 TIMES FASTER THAN THE **U-2**, AND DURING ITS FINAL TESTS FLEW AT 90,000 FEET FOR OVER AN HOUR WHILE SUSTAINING **MACH 3.2**, WELL OVER 3 TIMES THE SPEED OF SOUND!

CIA

A-12



THE **SR-71 BLACKBIRD** WAS THE AIR FORCE'S VERSION OF THE **A-12**: A DOUBLE SEATER PLANE WHICH FLEW NEARLY AS HIGH AND FAST AS THE **A-12**, AND HAD EVEN MORE CAMERAS AND SENSORS! IT SOON BECAME THE UNITED STATES' PREMIER SPY PLANE!

AND WITH THE **A-12** AND **SR-71** BOTH ACHIEVING SPEEDS OVER MACH 3, THEY WERE LITERALLY **FASTER THAN A SPEEDING BULLET!**

SR-71

AIR FORCE

INCOMING!

DID YOU GET A LOCK ON THE SAM SITE?

NO!!

DURING THE VIETNAM WAR, THE ENEMY'S PORTABLE SURFACE TO AIR MISSILES, OR "SAMS" WERE TAKING DOWN TOO MANY U.S. PLANES - AND BY THE TIME NEW SQUADRONS OF PLANES RETURNED TO BOMB THE SAM SITES, THE SITES HAD ALREADY BEEN MOVED!

SATELLITE PHOTOGRAPHY AND BUCKET CATCHING HAD IMPROVED DRAMATICALLY, BUT THE PROCESS WASN'T FAST ENOUGH TO REVEAL SAM SITES QUICKLY.

FORTUNATELY, MACH 3 PLANES WERE PERFECT FOR THE JOB!

DURING OPERATION BLACK SHIELD, THE A-12 HAD ALREADY BEEN TESTED AND WAS READY TO GO EARLIER THAN THE SR-71, SO IT BECAME THE FIRST OF THE PLANES TO SEE ACTION!

STARTING IN 1967, THE A-12 CONDUCTED DOZENS OF SUCCESSFUL VIETNAM MISSIONS WITH BARELY A SCRATCH!

SAM SITE LOCATED!

VIPER 1, WE'RE TRACKING INCOMING MISSILES!

DON'T WORRY, YOU KNOW I CAN OUTRUN 'EM!

IN 1968, THE A-12 ALSO FLEW SUPERSONIC FLIGHTS OVER NORTH KOREA TO GATHER CRITICAL INTELLIGENCE ON THE U.S.S. PUEBLO SPY SHIP AND ITS CREW, WHICH HAD BEEN ILLEGALLY SEIZED BY THE NORTH KOREANS.

NORTH KOREA

WONSAN HARBOR

USS PUEBLO

I GOT THE PHOTOS, SIR! I DON'T EVEN THINK THEY KNEW I WAS THERE!

THE INTELLIGENCE HELPED THE U.S. DECIDE ON THE APPROPRIATE DIPLOMATIC SOLUTION, WHICH LED TO THE CREW'S SAFE RETURN.

THE A-12 WAS RETIRED SOON AFTER, LEAVING THE SR-71 AS THE UNMATCHED MACH 3 CROWN JEWEL OF U.S. AIRPLANE SECRET MISSIONS!

THE **SR-71** BLACKBIRD WAS INTENDED TO BE KEPT SECRET FROM THE PUBLIC, BUT THAT ENDED UNEXPECTEDLY IN 1964!

PRESIDENT **LYNDON JOHNSON**, LOOKING FOR A POPULARITY BOOST DURING THE '64 ELECTION YEAR, REVEALED THE MACH 3 PLANE TO THE WORLD - STARTLING THE TEAMS WHO HAD WORKED ON IT IN SECRET FOR MANY YEARS!

THE **SR-71** AIRCRAFT RECONNAISSANCE SYSTEM IS THE MOST ADVANCED IN THE WORLD...

PRESIDENT LYNDON JOHNSON

YOU MEAN I CAN TELL MY WIFE WHAT I'VE BEEN DOING HERE AT **AREA 51** NOW?

LOOKS LIKE IT!

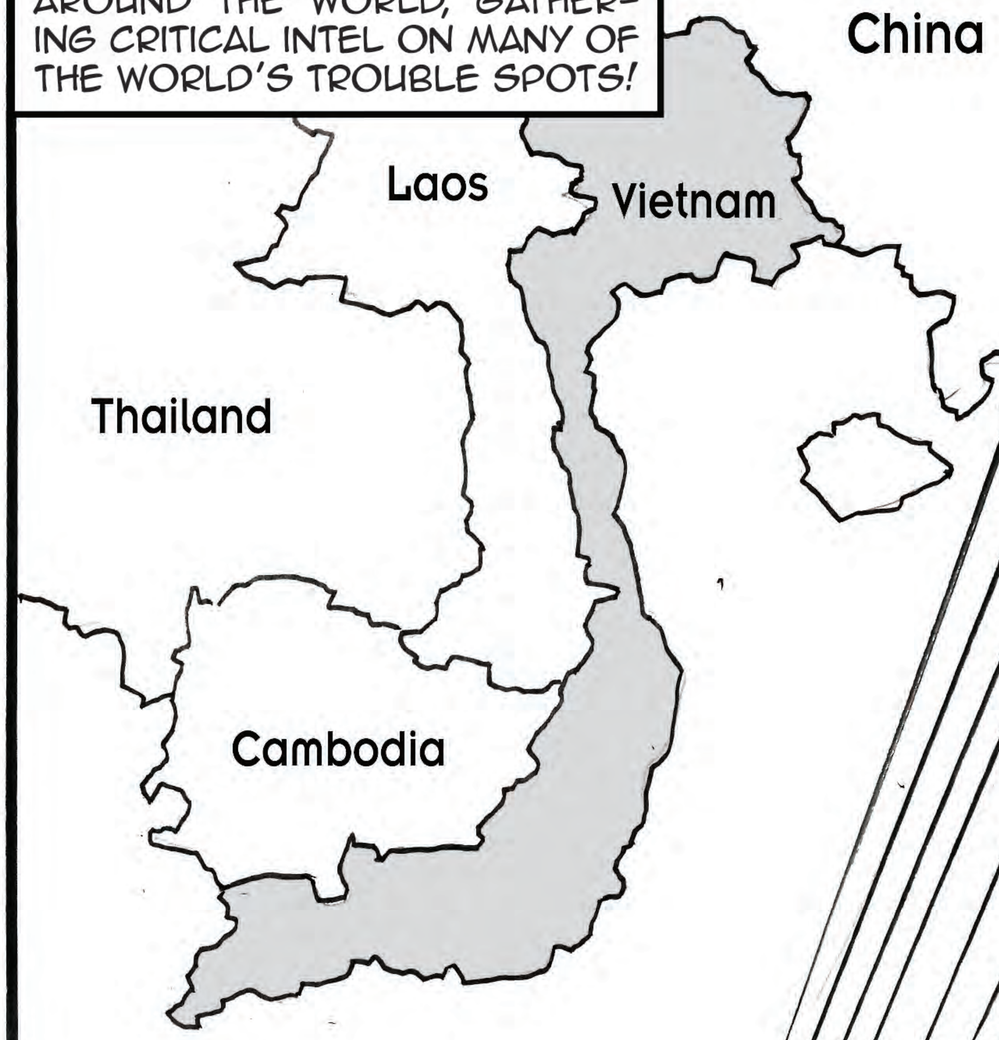
UMM - WAIT! WHAT I MEAN IS -

...YOU CAN SAY "**SR-71**," BUT DON'T DARE SAY "**AREA 51**!"*

*THE EXISTENCE OF **AREA 51**, THE TOP SECRET AIRCRAFT DEVELOPMENT AND TESTING FACILITY IN NEVADA WHERE THE **SR-71** WAS ENGINEERED, WAS NOT DECLASSIFIED UNTIL **2013**!

IN 1968, THE BLACKBIRD CONTINUED SURVEILLANCE OVER VIETNAM AND LAOS WITH AN AVERAGE OF ONE MISSION PER WEEK - AND BY 1972 WAS FLYING NEARLY ONE MISSION PER DAY!

MISSIONS CONTINUED ALL AROUND THE WORLD, GATHERING CRITICAL INTEL ON MANY OF THE WORLD'S TROUBLE SPOTS!



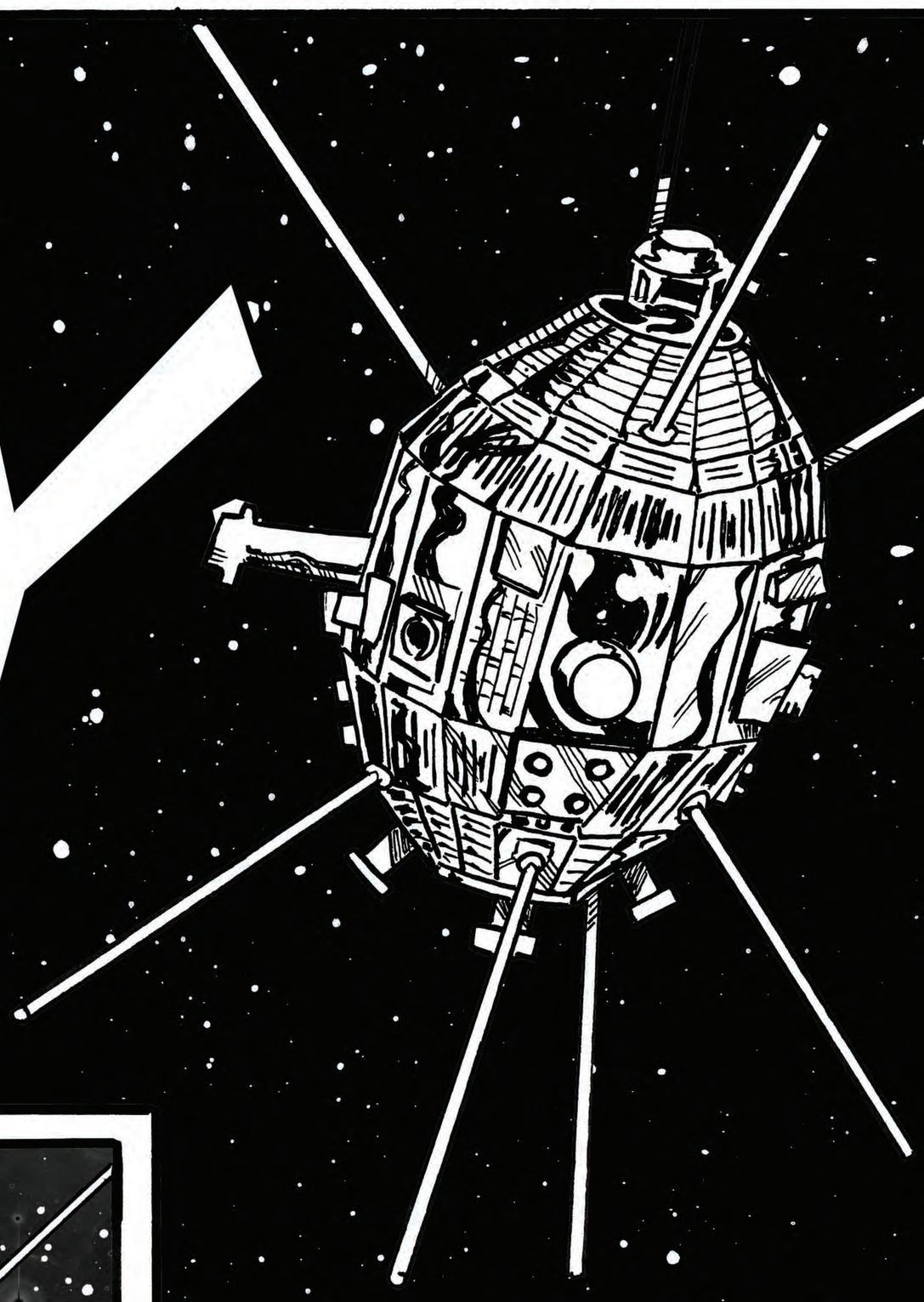
ON NOV. 24TH, 1971 A PLANE HIJACKER KNOWN AS **D.B. COOPER** PARACHUTED WITH RANSOM MONEY OUT OF A HIJACKED PLANE SOMEWHERE OVER THE AMERICAN NORTHWEST...

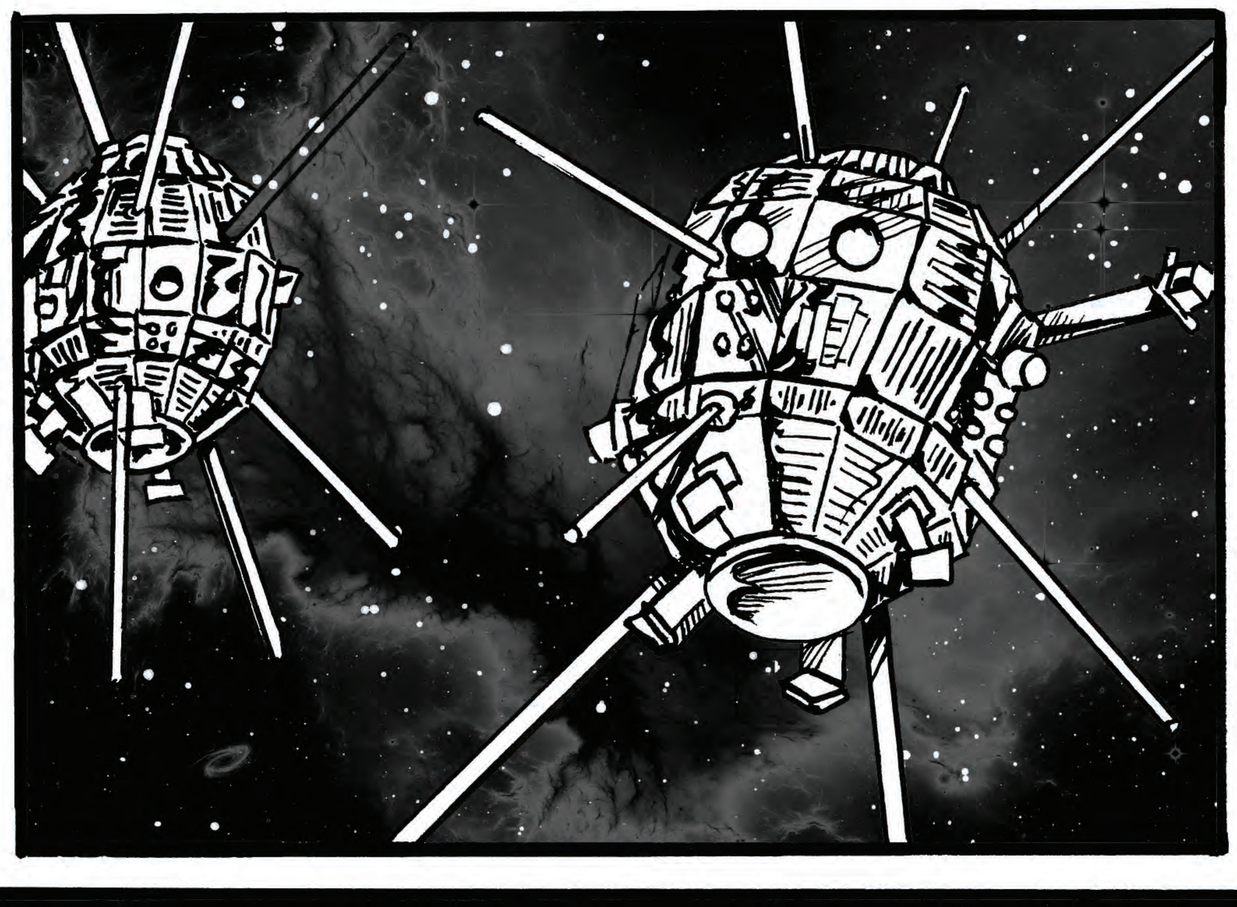
AND LAW ENFORCEMENT EVEN ENLISTED AN **SR-71** IN THE HUNT TO FIND HIM!

ON THE SATELLITE SIDE OF THE NRO, THE **NAVAL RESEARCH LAB** HAD LAUNCHED THE FIRST EVER SPY SATELLITE "**GRAB**" IN 1960, WHICH CONDUCTED SIGNALS INTELLIGENCE, OR "**SIGINT**" MISSIONS FOR THREE YEARS. THEN, IN 1962, **GRAB** GOT AN UPGRADE!

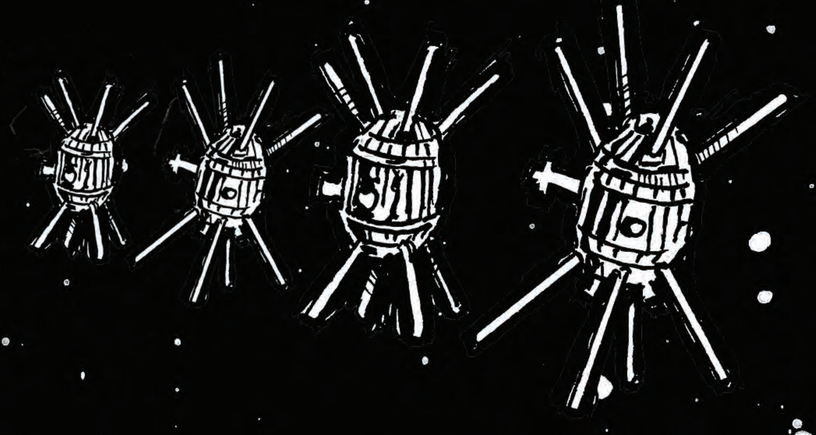
POPPY

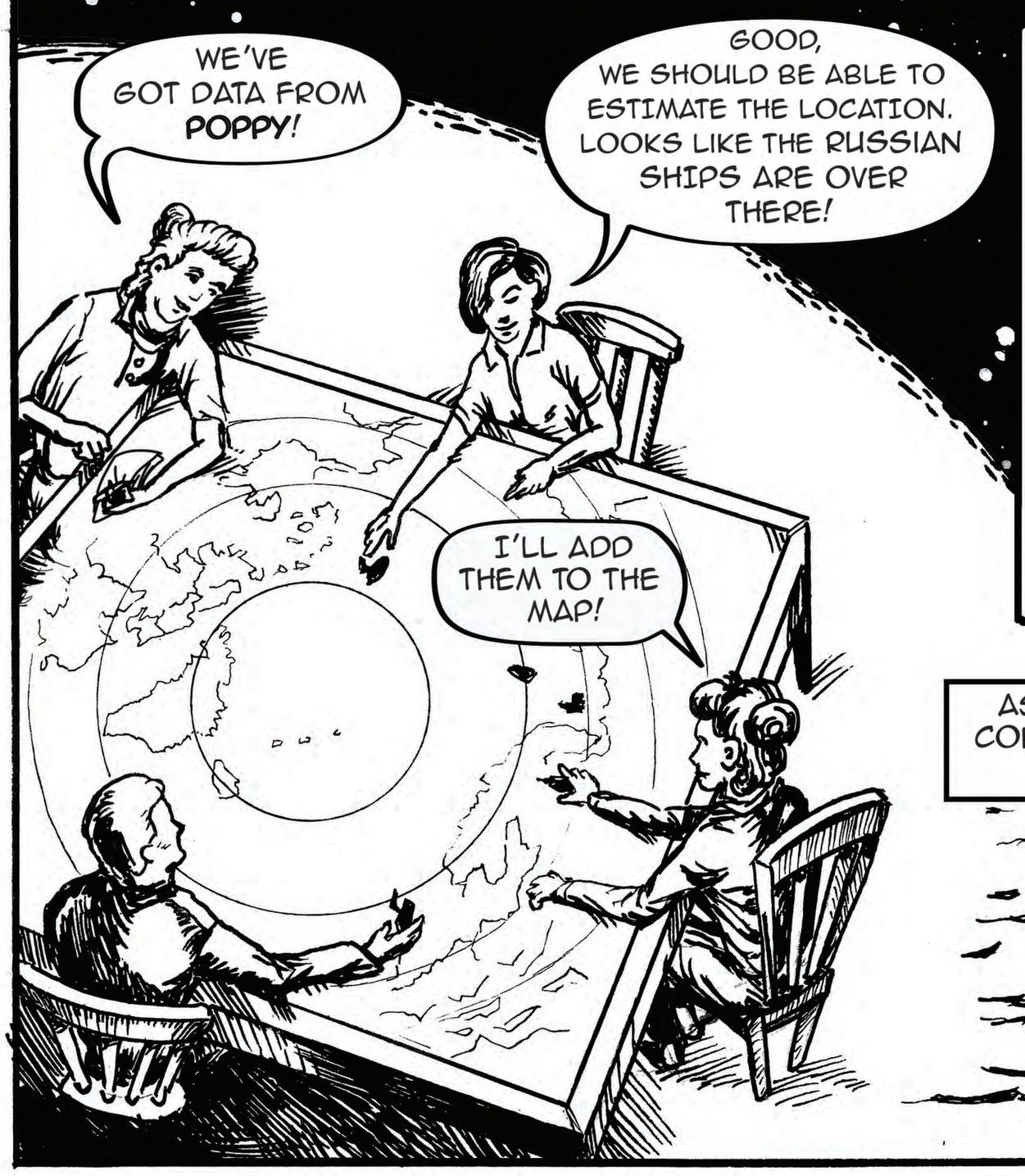
GRAB'S MORE ADVANCED SUCCESSOR "POPPY" INCREASED THE NUMBER OF SATELLITES IN ORBIT!

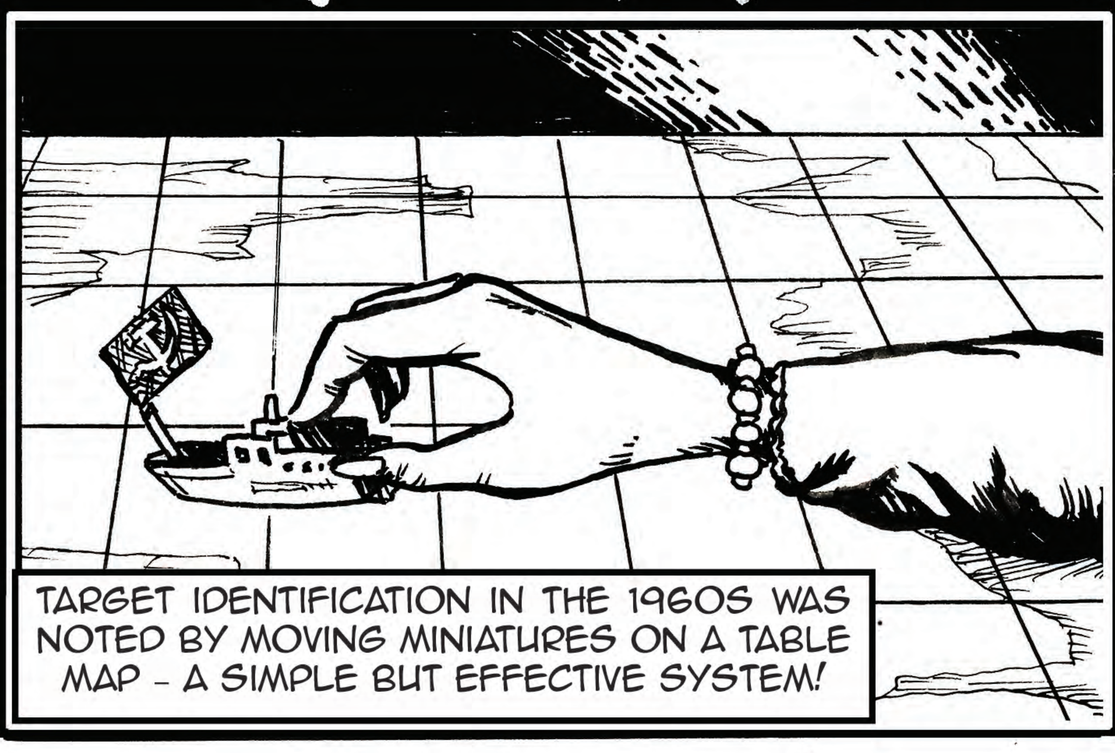




POPPY GREW TO OPERATE AS MANY AS FOUR SATELLITES AT A TIME!

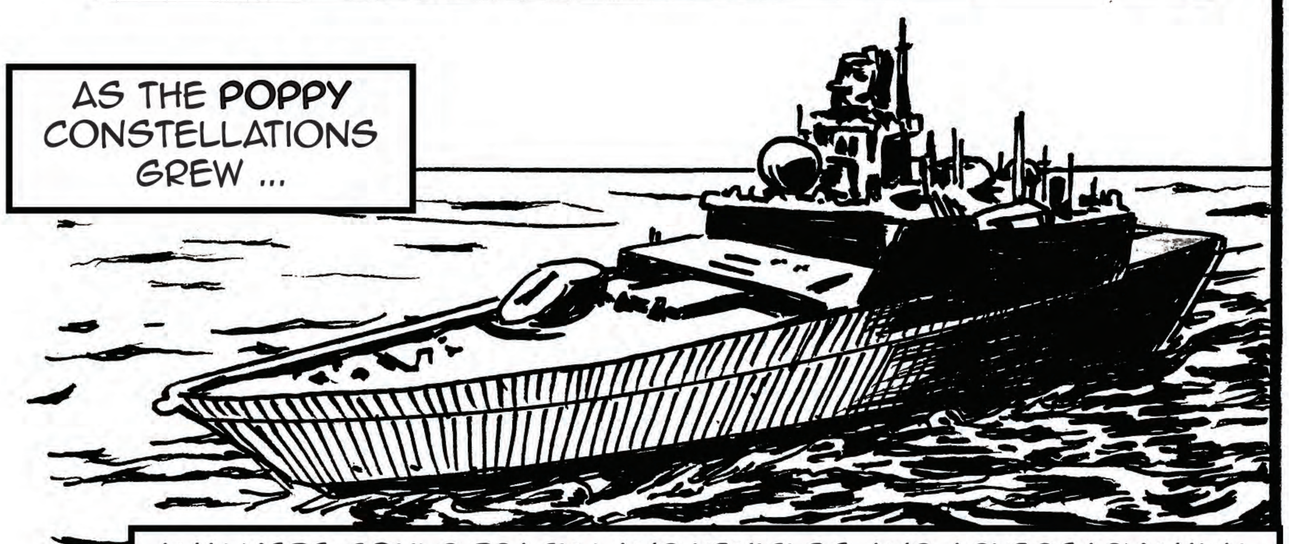






TARGET IDENTIFICATION IN THE 1960S WAS NOTED BY MOVING MINIATURES ON A TABLE MAP - A SIMPLE BUT EFFECTIVE SYSTEM!

AS THE **POPPY** CONSTELLATIONS GREW ...



ANALYSTS COULD TRACK LAND VEHICLES AND ADVERSARY NAVAL VESSELS WITH EVER MORE PRECISION, BENEFITING THE U.S. MILITARY - ESPECIALLY THE **U.S. NAVY**!

NEW GENERATIONS OF BUCKET DROPPING SPY SATELLITES SOON WENT INTO ORBIT!

APPROPRIATELY NAMED AFTER THE OPENING MOVE OF A CHESS GAME, THE FIRST **GAMBIT** SATELLITE WENT INTO SPACE IN 1963...

GAMBIT

GAMBIT PROVIDED THE NRO WITH EXTREMELY HIGH RESOLUTION PHOTOGRAPHY - AND THE NEXT GENERATION SATELLITE **GAMBIT 3** HAD GROUND RESOLUTION SO GOOD THAT OBJECTS LESS THAN 1 FOOT IN SIZE COULD BE READILY RECOGNIZED!

LOOK AT THE TURRET SHAPE HERE. THAT'S A T-72 TANK FOR SURE!

YOU'RE RIGHT!

HEY, WAIT A MINUTE-

IS THIS OUR NEW SATELLITE OR SOMETHING? I'VE NEVER SEEN SUCH HIGH QUALITY PHOTOS!

YOU BET! IT'S THE NEW SATELLITE **GAMBIT 3**!

HEXAGON

HEXAGON WAS ANOTHER BIG ADVANCE IN FILM COLLECTION FROM SPACE! FIRST LAUNCHED IN 1971, IT CONTAINED **FOUR** SEPARATE BUCKETS OF HIGH RESOLUTION FILM, PERFORMED WIDE AREA SEARCHES, AND COULD STAY ON ORBIT UP TO **9 MONTHS!** IT WAS A HUGE IMPROVEMENT FROM THE EARLY DAYS OF SURVEILLANCE FROM SPACE WHEN **CORONA,** WITH A SINGLE BUCKET, COULD ONLY STAY ON ORBIT FOR A WEEK!

ALL RIGHT, RUSSIA SAID THEY DESTROYED HALF THE MISSILES HERE AT BERSHET. LET'S TAKE A LOOK!

CAN'T WE JUST TAKE THE SOVIET UNION AT THEIR WORD?

VERY FUNNY.

GAMBIT AND **HEXAGON** WERE KEY IN VERIFYING ARMS CONTROL TREATIES BETWEEN THE U.S. AND THE USSR!

UFO?

WITH SO MUCH NEW SPACE TECHNOLOGY, SECRET SPY SATELLITES, ROCKETS AND SUPERSONIC SPY PLANES GOING INTO THE SKIES, IT'S NO SURPRISE THAT MANY OF THEM WERE MISTAKEN FOR **UFOS**!

FOR EXAMPLE, IN 1962 **NASA** ANNOUNCED A SUCCESSFUL TEST OF THEIR ROCKET POWERED **X-15** PLANE, AND RELEASED A SERIES OF PHOTOS TO THE MEDIA TAKEN **BY** THE X-15!

NASA

U.S. AIR FORCE

BUT ONE PHOTO SHOWED THIS! AND THE PUBLIC SOON DECLARED...

LOOK! **NASA** PHOTOGRAPHED A **UFO**!

A **UFO**? MAYBE IT'S JUST ANOTHER **NASA** PROJECT? OR **AIR FORCE** PROJECT?

NO PLANE CAN FLY THAT HIGH, AND THERE'S ONLY ONE **X-15**!

THE RUSSIANS WOULD NEVER TEST A SECRET CRAFT OVER OUR AIRSPACE!

NOPE! IT'S A REAL **UFO** FOR SURE!

NASA Photographs UFO During Test

THE **NRO** KNEW WHAT THE "**UFO**" REALLY WAS BUT WAS SWORN TO SECRECY. IT TURNS OUT THAT THE MARCH 30TH, 1962 "**UFO**" WAS ACTUALLY THE FIRST TEST FLIGHT OF THE SUPERSONIC MACH 3 "**A-12**" SPY AIRPLANE!

ALL SYSTEMS GO, NOW SURPASSING MACH 2!

WHAT THE WORLD CALLED A UFO WAS PART OF **NRO'S PROGRAM D** – AND NOT EVEN **NASA** KNEW ABOUT IT!

A FEW YEARS LATER, THE **NRO** EXPERIMENTED WITH A METHOD TO ADD EXTRA SECRECY WHILE CATCHING FILM BUCKETS FROM SPACE - GRAB THEM AT NIGHT!

THE TESTS EQUIPPED **STAR CATCHERS** PLANES WITH STROBE LIGHTS TO ILLUMINATE THE DESCENDING PARACHUTE. PILOTS COULD SEE THE CHUTE BETTER - BUT IT SOMETIMES PERPLEXED CIVILIANS ON THE GROUND!

UFOs Reported Over Air Force Base Skies

LOOK AT THIS! SOME FELLOW WATCHED OUR TEST LAST NIGHT!

HE SAID THERE WAS A GIANT **GLOWING JELLYFISH** IN THE AIR...

THE CHUTE GETTING HIT BY THE STROBE LOOKED LIKE A JELLYFISH I GUESS...

NOW LISTEN TO THIS -

HE SAID THAT OUR **JC-130** WAS A BIG **UFO**! AND...

"THE BIG **UFO** CIRCLED THE JELLYFISH, GRABBED IT..."

"...DRAGGED IT OFF AND ABSORBED IT!" WELL, HE TELLS IT PRETTY ACCURATELY!

YEP! I THINK WE'VE DONE A GOOD JOB ABSORBING A LOT OF JELLYFISH PARACHUTES OVER THE YEARS!

SO - DO **YOU** WANT TO CALL THE NEWSPAPERS AND TELL THEM IT'S NOT REALLY A JELLYFISH FROM SPACE?

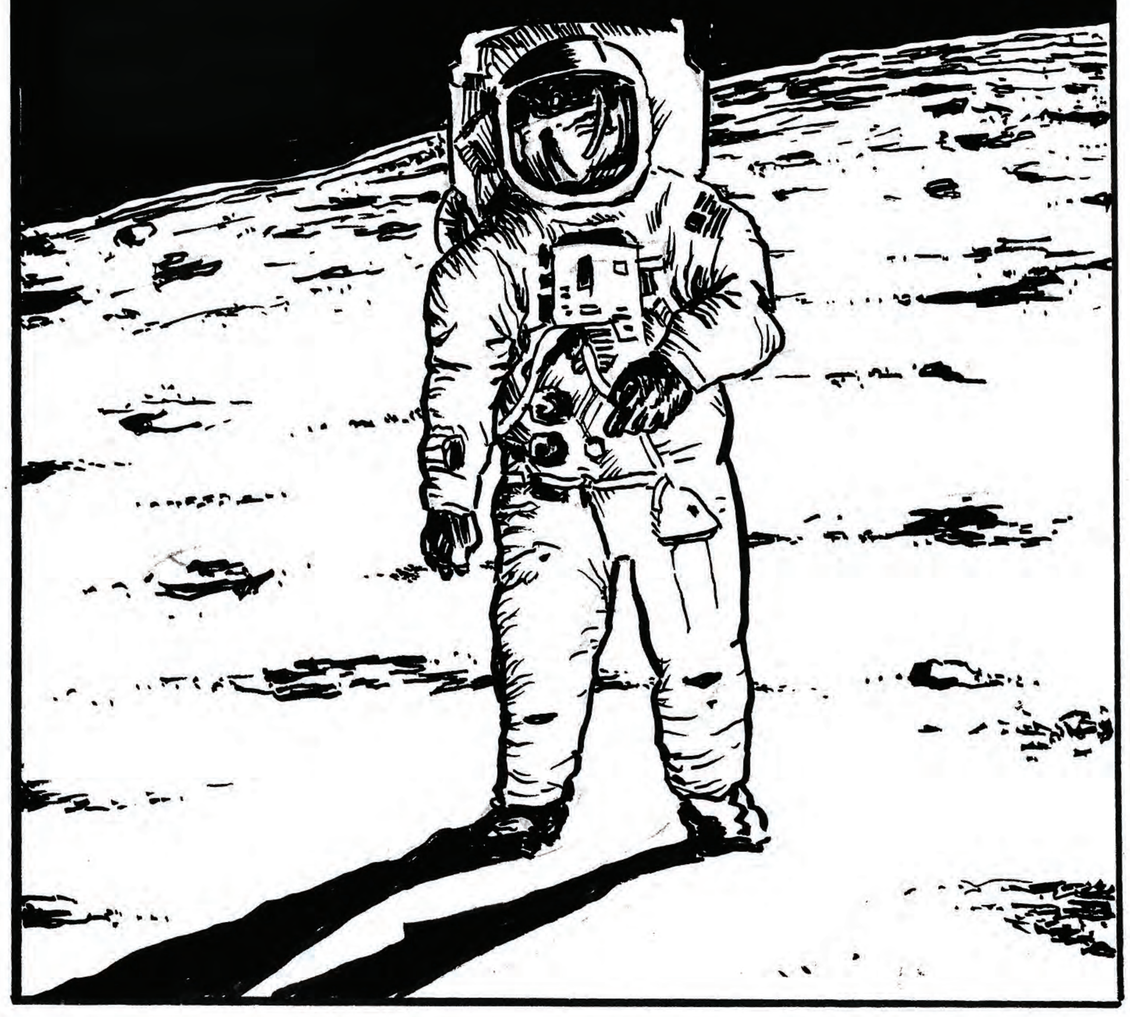
SAY IT'S REALLY A PARACHUTING BUCKET OF SPY FILM IN A SUPER SECRET PROGRAM THAT WE'RE USING TO SPY ON THE RUSSIANS, BUT DON'T LET THEM KNOW PLEASE?

NOT ME!

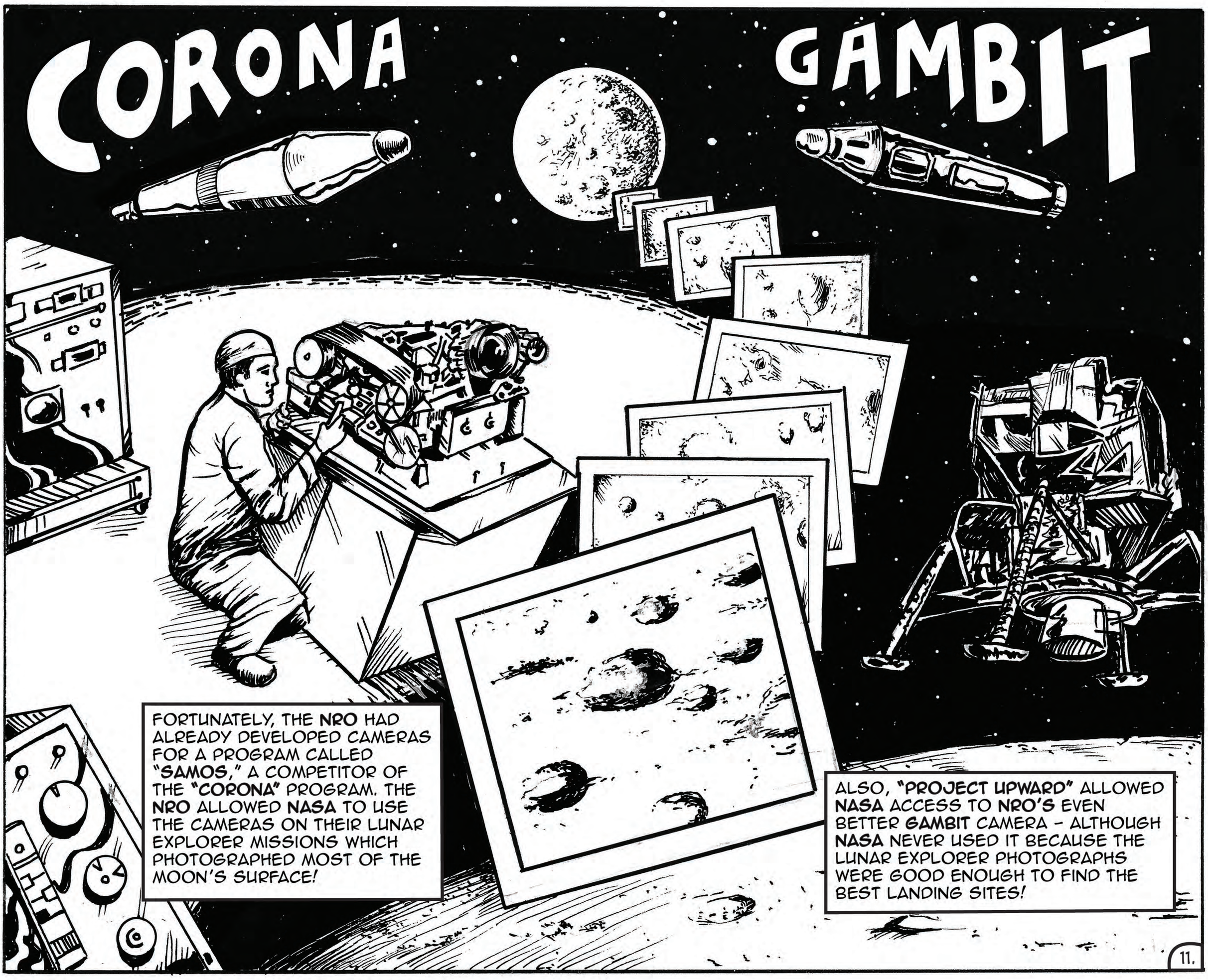
NOPE! ME NEITHER!

NASA, the NRO AND THE MOON!

EVEN THOUGH THE **NRO** WAS A TOP SECRET AGENCY UNKNOWN TO THE WORLD IN THE 1960S, THE **NRO** PLAYED A BIG PART IN THE BIGGEST SPACE EVENT OF ALL TIME - THE **MOON LANDINGS!**



ONE OF **NASA'S** EARLY CHALLENGES WAS TO OBTAIN HIGH QUALITY IMAGERY OF THE MOON TO IDENTIFY A GOOD LANDING SITE FOR THE **APOLLO ASTRONAUTS.**



FORTUNATELY, THE **NRO** HAD ALREADY DEVELOPED CAMERAS FOR A PROGRAM CALLED "**SAMOS**," A COMPETITOR OF THE "**CORONA**" PROGRAM. THE **NRO** ALLOWED **NASA** TO USE THE CAMERAS ON THEIR LUNAR EXPLORER MISSIONS WHICH PHOTOGRAPHED MOST OF THE MOON'S SURFACE!

ALSO, "**PROJECT UPWARD**" ALLOWED **NASA** ACCESS TO **NRO'S** EVEN BETTER **GAMBIT** CAMERA - ALTHOUGH **NASA** NEVER USED IT BECAUSE THE LUNAR EXPLORER PHOTOGRAPHS WERE GOOD ENOUGH TO FIND THE BEST LANDING SITES!

HOWEVER, ASTRONAUTS **NEIL ARMSTRONG**, **BUZZ ALDRIN** AND **MICHAEL COLLINS** STILL HAD TO RETURN TO EARTH SAFELY! THEIR VOYAGE HAD BEEN PLANNED TO THE FINEST DETAIL –

UNTIL AN UNEXPECTED WEATHER PROBLEM THREATENED TO SINK THE ENTIRE MISSION...

LITERALLY!

THE **NRO'S** SECRET **DMSP** WEATHER SATELLITES HAD PICKED UP VIOLENT THUNDERSTORMS RIGHT WHERE THE **APOLLO 11 ASTRONAUTS** WERE SET TO TOUCH DOWN!

I DON'T BELIEVE IT!

THE ASTRONAUTS ARE HEADED RIGHT FOR THE WORST OF THE STORMS!

IT WAS NO TIME TO RUN OUT TO A PHONE BOOTH WITH A ROLL OF DIMES!

THERE'S ONLY ONE PERSON WORKING WITH **NASA** WHO'S CLEARED TO GET TOP SECRET DATA FROM OUR **DMSP** SATS – AND HE'D BETTER BE IN!

CAPTAIN **HOUSTON** HERE!

CAPTAIN WILLARD "SAM" HOUSTON, JR. WAS CLEARED FOR SECRET **NRO** WEATHER INFORMATION, AND QUICKLY MADE EMERGENCY CALLS TO NAVY LEADERSHIP – AND THE WHITE HOUSE!

EVERY MINUTE COUNTS IF WE'RE GOING TO KEEP OUR ASTRONAUTS FROM FLYING INTO THE MIDDLE OF THAT **HURRICANE!**

CAN WE GET **NASA** TO REROUTE THE REENTRY?

THE CHUTES MIGHT TANGLE UP AND THE IMPACT COULD KILL THEM!

DON'T WORRY, CAPTAIN, WE'RE NOT GOING TO LOSE OUR ASTRONAUTS!

THE NAVY'S CARRIER TASK FORCE WAS MOVED TO THE NEW LOCATION TO RECOVER THE **APOLLO 11** CREW AT THEIR NEW SPLASHDOWN LOCATION JUST IN TIME!

THEY'VE SPLASHED DOWN SAFELY!

IT'S A NICE DAY FOR FISHING! LETS BRING THEM IN!

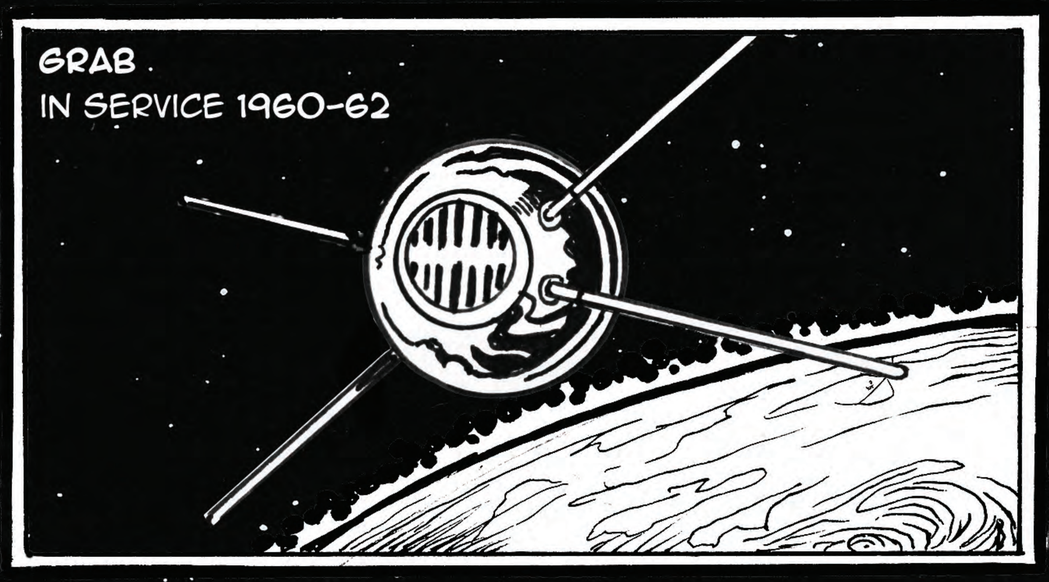
THE **NRO'S** OWN SECRET WEATHER SATELLITES HAD SAVED THE DAY! BUT EVERYONE INVOLVED HAD TO KEEP THE OPERATION SECRET UNTIL **1995** WHEN IT WAS FINALLY REVEALED TO THE PUBLIC!

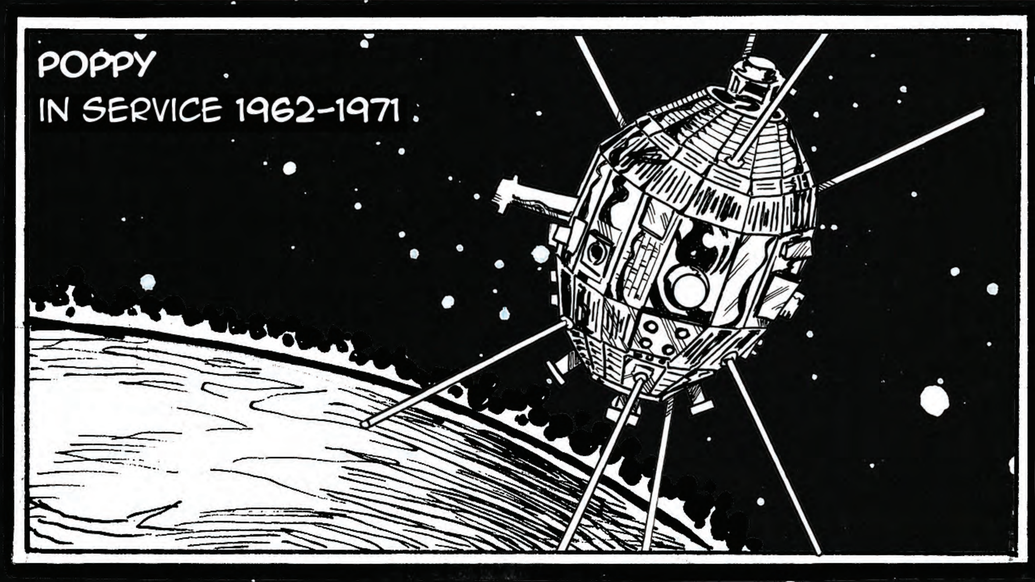
AFTER MANY YEARS OF INVALUABLE SERVICE, **GRAB** HAD BEEN RETIRED AND **POPPY** WAS DUE FOR AN UPGRADE - WHICH CAME COURTESY OF

PARCAE

FIRST LAUNCHED IN 1976, **PARCAE** TOOK THE SEARCH FOR ADVERSARY **SIGINT** TO THE WORLD'S OCEANS AND THE SOVIET NAVY. **PARCAE** KEPT VERY CLOSE EARS ON THE SOVIET NAVY -

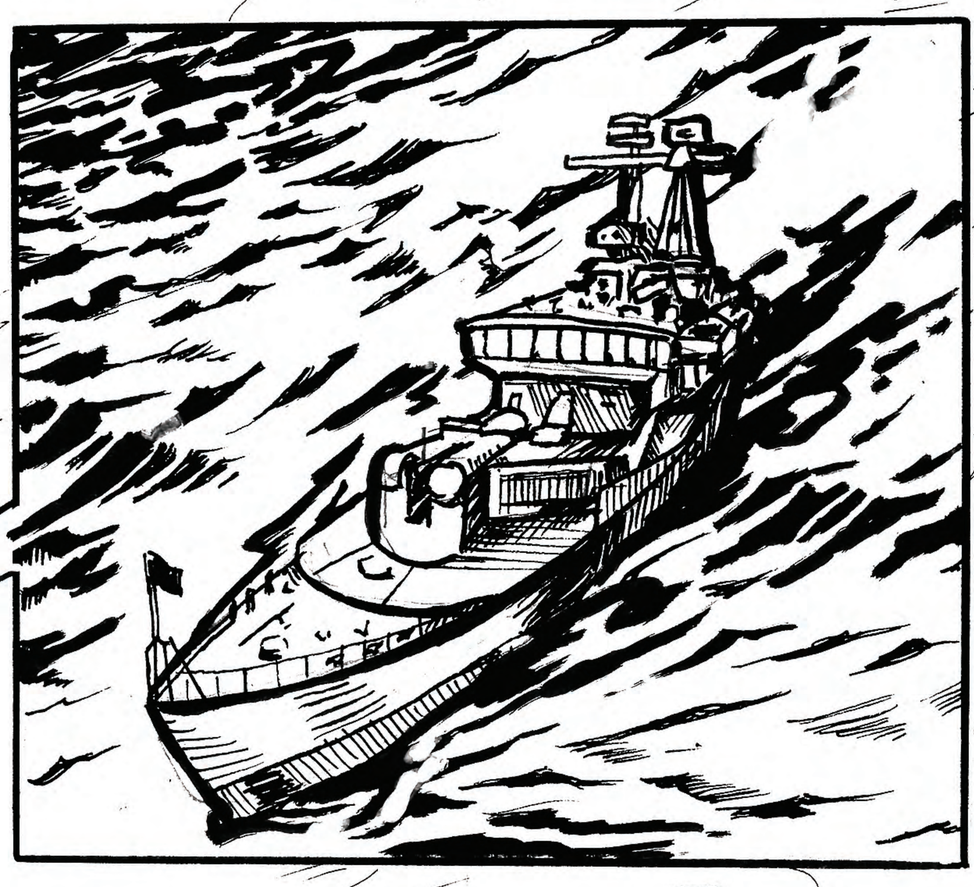
-AND ACHIEVED UNPRECEDENTED RESULTS!





PARCAE TRACKED BOATS AND EVEN DISCOVERED PREVIOUSLY UNKNOWN RUSSIAN VESSELS!

PARCAE'S LAST LAUNCH TOOK PLACE IN 1996, AND ITS EXISTENCE WAS DECLASSIFIED IN 2023! FINALLY, **PARCAE** AND ITS CONTRIBUTIONS WERE KNOWN TO THE PUBLIC!



ALSO IN 1976, **NASA** UNVEILED THE

SPACE SHUTTLE

THE FIRST EVER REUSABLE ORBITER SPACECRAFT! INSTEAD OF BURNING UP UPON REENTRY LIKE A ROCKET, THE SHUTTLE WOULD RETURN FROM SPACE SAFELY AND PREPARE FOR ITS NEXT MISSION!

SINCE STAR TREK FANS HAD LOBBIED FOR THE SHUTTLE TO BE NAMED "ENTERPRISE," FITTINGLY, THE ORIGINAL STAR TREK CAST WAS INVITED TO THE UNVEILING!

BEHIND ALL THE PUBLICITY, THOUGH, WAS THE FACT THAT THE STILL TOP SECRET **NATIONAL RECONNAISSANCE OFFICE** COULD NOW USE THE SHUTTLE FOR DELIVERY OF SOME OF THEIR SATELLITES INTO ORBIT! IN FACT, THE SIZE OF THE SHUTTLE BAY WAS SPECIFICALLY MADE TO CARRY A **HEXAGON** SATELLITE.

SATELLITES SOON BOLDLY WENT INTO SPACE, DELIVERED AS NO SATELLITES HAD GONE BEFORE!

BY THE LATE 1960S, TAKING PHOTOS FROM SPACE AND DROPPING THE FILM BUCKETS TO EARTH WAS A STREAMLINED PROCESS. BUCKET CATCHING WAS RELIABLE – BUT IT WASN'T **FAST**!

THE **1968** RUSSIAN INVASION OF **CZECHOSLOVAKIA** TOOK AMERICA BY SURPRISE. THE PHOTOS SHOWING RUSSIAN FORCES NEAR THE BORDER WEREN'T SEEN IN TIME!

WHEN **PRESIDENT RICHARD NIXON** TOOK OFFICE IN 1969, HE REALIZED CHANGES WERE IN ORDER.

THE U.S. COULD HAVE DONE SOMETHING ABOUT THE RUSSIAN INVASION IF THESE PHOTOS HAD BEEN AVAILABLE EARLIER!

I THINK YOU'RE RIGHT. THESE PHOTOS ARE EXCELLENT, BUT WAITING A WEEK FOR THEM IS TOO LONG!

LET'S CONVENE OUR SCIENCE PANEL TO SEE WHAT WE CAN WE DO TO SPEED THIS UP!

PRESIDENT RICHARD NIXON

NATIONAL SECURITY ADVISOR HENRY KISSINGER

FORTUNATELY, IN THE MID 1970S THE NRO'S IMAGERY SATELLITES FINALLY GOT THE UPGRADE THEY DESERVED! WITH **PRESIDENT NIXON** GREENLIGHTING THE DEVELOPMENT, THE BEST SCIENTISTS IN THE WORLD ENGINEERED "**KENNEN**," LAUNCHED IN LATE 1976! **KENNEN** HAD THE ABILITY TO BEAM HI-RES IMAGES TO EARTH IN A PROCESS SO FAST IT WAS CALLED "**NEAR REAL-TIME**," OR **NRT**!

THE DIGITAL PHOTO AGE HAD FINALLY BEGUN, AND IT WAS THE **NRO** THAT PIONEERED THE CUTTING EDGE TECHNOLOGY LONG BEFORE TV BROADCASTERS, CONSUMER PHOTOGRAPHY OR, MORE IMPORTANTLY, ANY OF OUR **ADVERSARIES** EVER DID!

AS **NRT** IMAGING CONTINUED TO IMPROVE, IT WAS CLEAR THAT THE DAYS OF BUCKET CATCHING WERE NUMBERED!

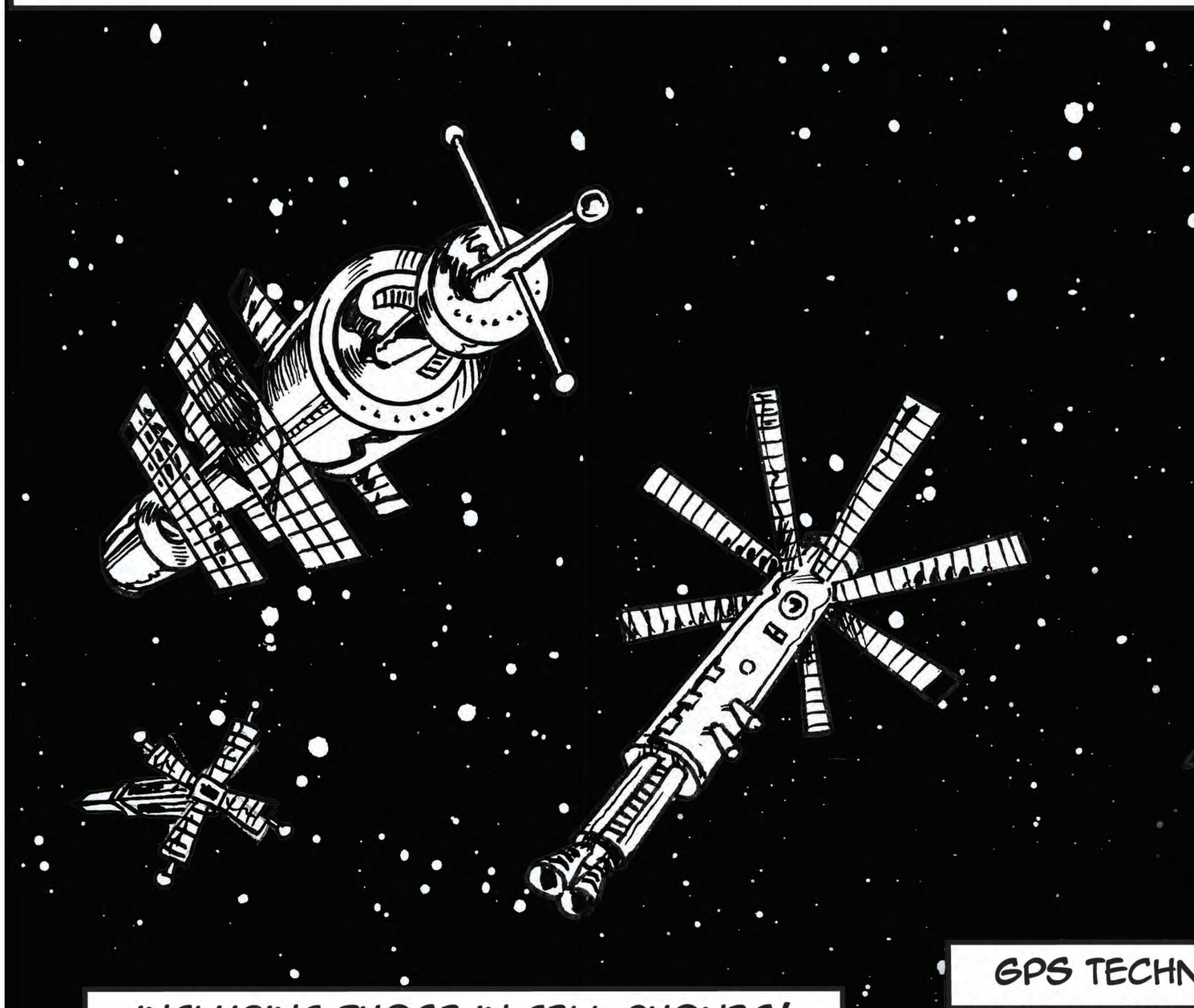
IN **1984**, NATIVE HAWAIIANS **RANDY CHANG** AND **MARSHALL ETO** BECAME THE LAST PILOTS TO CATCH FILM BUCKETS FROM **GAMBIT** AND **HEXAGON**, RESPECTIVELY!

RANDY CHANG

MARSHALL ETO

THE **STAR CATCHERS** ERA HAD ENDED, BUT THE **NEAR REAL TIME IMAGERY ERA** HAD BEGUN!

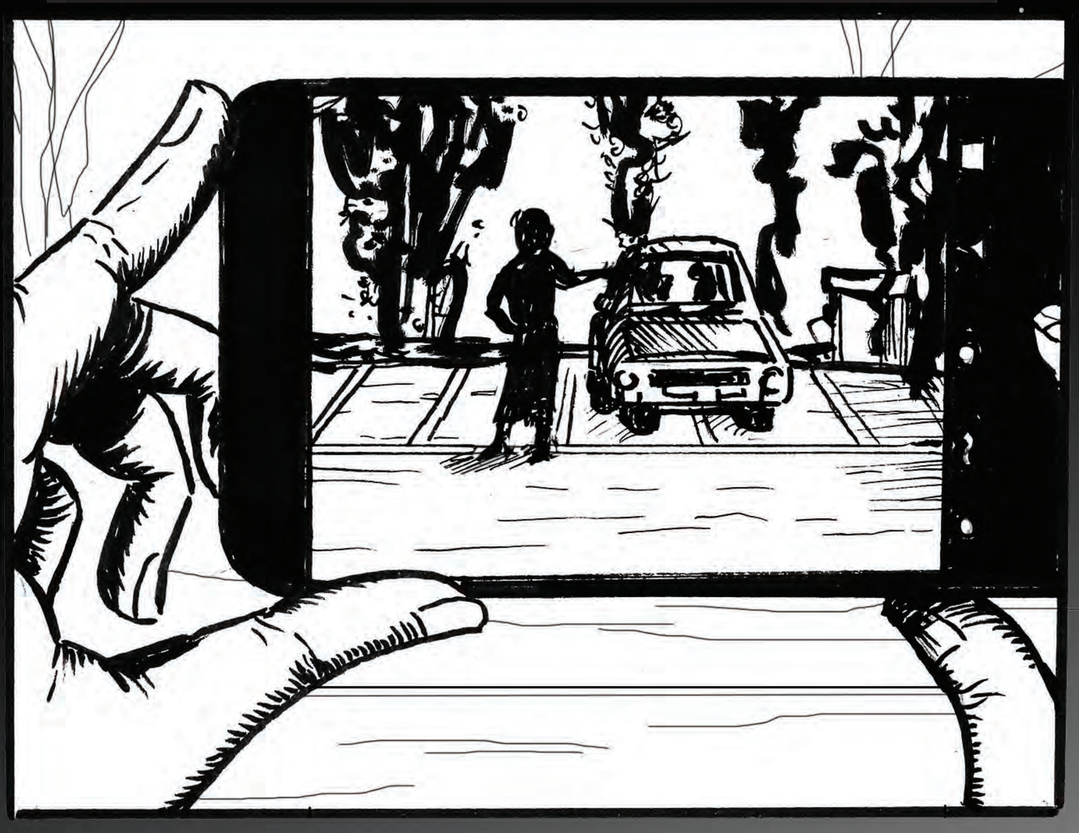
IN ADDITION TO PIONEERING PHOTORECONNAISSANCE AND SIGINT RECONNAISSANCE FROM SPACE, THE **NRO** WAS ALSO THE FIRST TO PIONEER HI-RESOLUTION IMAGERY, GEOLOCATION, AND MORE! THESE ARE THE TECHNOLOGIES THAT LED TO:



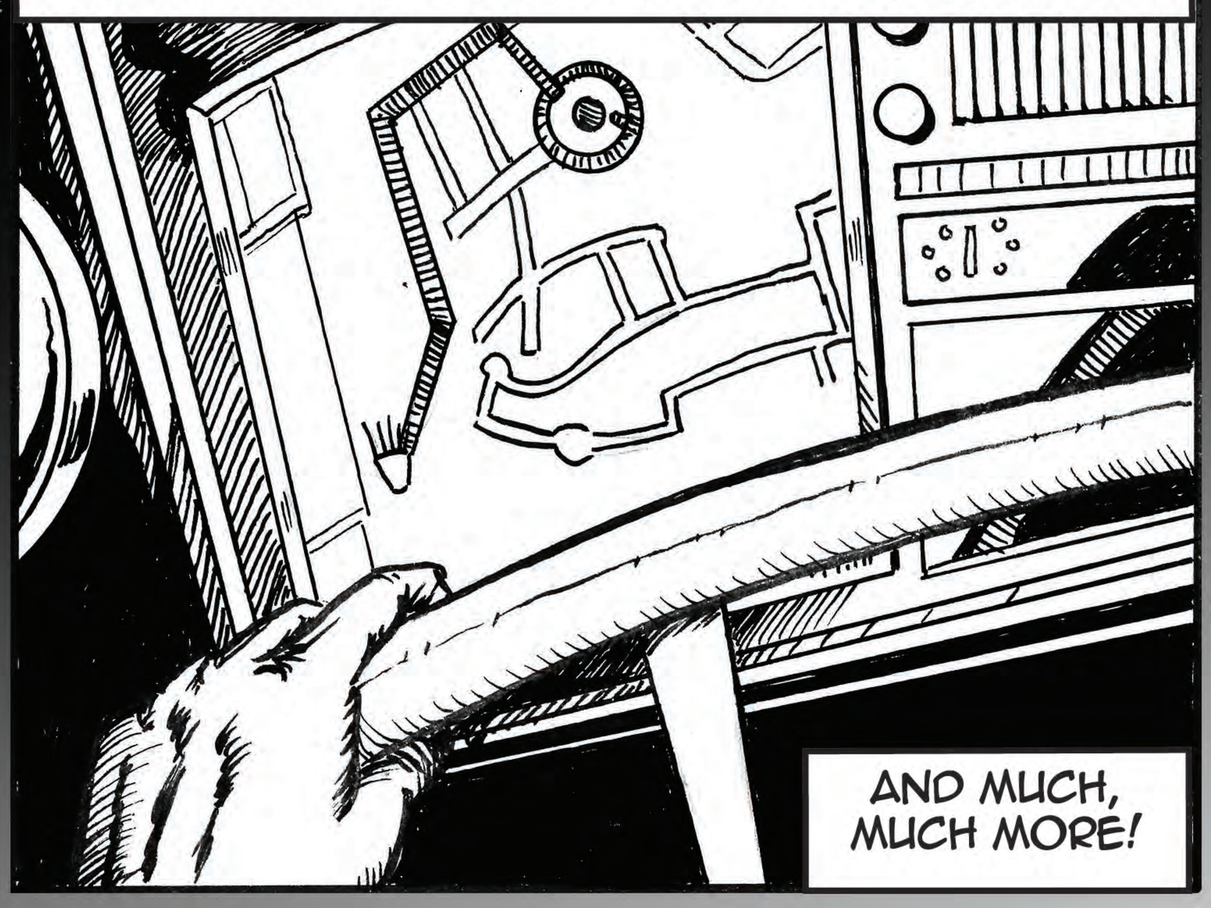
HDTV!

FEATURING THE SAME SYSTEMS USED IN DIGITAL CCD CAMERAS,

INCLUDING THOSE IN CELL PHONES!



GPS TECHNOLOGY NOW IN USE EVERYWHERE...



AND MUCH, MUCH MORE!

FOR MANY DECADES, THE **NRO** HAS LED THE WAY IN SPACE BASED RECONNAISSANCE, AND PIONEERED CUTTING EDGE TECHNOLOGIES THAT HAVE CHANGED THE WORLD! BUT JUST WAIT - **THE BEST IS YET TO COME!**

SUPRA ET ULTRA!
ABOVE AND BEYOND!

Kent Wadburn 2024

CENTER FOR THE STUDY OF NATIONAL RECONNAISSANCE

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PUBLISHED BY:

NATIONAL RECONNAISSANCE OFFICE
CENTER FOR THE STUDY OF NATIONAL RECONNAISSANCE
14675 LEE ROAD
CHANTILLY, VA 20151-1715

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