

**1129th SPECIAL ACTIVITIES SQDN
GROOM LAKE
AREA 51
MISSION SUPPORT GROUP
End 1961 through mid 1965**

WHO WE WERE AND WHAT WERE OUR RESPONSIBILITIES

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Chief Mission Support Group**

Note that this Article covers a time frame late 1961 through mid-1965, as that is the time frame when I arrived and then departed the Area to run the SR-71 Blackbird program at the Recon Center at SAC Hdqrs at Omaha Nebraska. The Unit stayed intact until late 1968 having deployed and flown sorties over Viet Nam as well as other locales.

Arriving at Las Vegas Nevada, I as well as others had absolutely no idea of what our assignment held in store for us. I for one thought I was being assigned to a unit stationed at Nellis AFB located at Las Vegas, WRONG!

Upon arriving at the Ranch, I was taken to my Quarters (House Six which through no planning became the unofficial Officers Club) and told we would be spending Mondays through Fridays at the Ranch! I truly had some misgivings as how to break this bit of news to my wife Mary. Many many things that were shared at other assignments were now going to be the wives responsibility, and that indeed was a long list.

I was taken to meet with the Director of Operations, then Colonel Doug Nelson, who informed me of my duties. I was to be Chief of the Mission Support Group for this new aircraft capable of Mach 3 speeds at an altitude of 90,000 feet. My fastest and highest altitude ever was 600 mph at 40,000 feet!

I was told that my staff would consist of five (5) Officers, three (3) enlisted personnel and one (1) Airborne Instrumental Laborities (AIL) Tech. Support individual. I can only say that whomever or however this supporting staff was assembled, it was a stroke of genius. They were top notch. Bill Corbin, Al Rossetti, Frank Moon, John Clunk, Harold Mills, Ron Mick, Tom Henwood and the AIL Tech Rep, Bill Goodwin, commonly known as WAG.

At this moment in time there was absolutely nothing we were charged to do other than order desks, chairs etc. as we had no idea as to any specifications or any other info on the aircraft except that this Bird was something we had never seen the likes of before.

Shortly after arriving, I plus a couple of others, were flown to the Lockheed Facility at Burbank where we were introduced to Kelly Johnson, at which time he briefed us on the A-12 capabilities. He then took us on a tour of the Skunk Works (the name commonly given to this Lockheed Plant in Burbank). In amazement we saw large and small sections of the A-12, but no fully assembled aircraft. We were told that the reason for this being that this was the way it would come to the Ranch, i.e. in large pieces placed in crates! They would then be shipped by truck under tight security to the Ranch where they would be assembled. I was introduced to my Lockheed contact, Hugh Stocker who at one time flew as a Navigator on the Pan Am Clipper Aircraft that traversed the Pacific during the pioneering days of that era.

Shortly after returning to the Ranch, I received a performance manual and at that time our staff began to study what we needed to do, which primarily meant to verify the anticipated aircraft performance data, and the planning of training sorties that would simulate operational missions.

Many many round table discussions were held on this subject, to include Project Pilots once they began flying the Bird.

During the aforementioned meetings, we also determined that the following procedures were also necessary in order to meet our goals such as, map preparation, photographing the map, preparing the map for cockpit storage, prepare a cassette of the photographed map for insertion into the cockpit instrument panel, determining air refueling locations, coordination with the Tanker Squadron, coordination of training routes with cleared personnel within the FAA, brief Pilots prior to flight and debrief Pilots after the flight. and most important to verify that the anticipated performance data by Lockheed was as projected.

With regards to the planning of stateside training routes, one of the limitations we were faced with, was the restriction of over flying cities of 25,000 or more population due to the Sonic Boom problems. I might add that once we started flying the training missions, that the Navy and Air Force sure got blamed for a lot of Boom problems. My FAA contact would call and we'd joke as to whom we wished to blame that day.

Early on we were advised that the mission planning would be enhanced and speeded up by having an electronic piece of equipment that would essentially lay out on a map the route to be flown, leaving a little less for us to do. A special room was made to handle this rather large piece of equipment. We merely had to place latitudes and latitudes of the desired route into the machine and it did the rest except for the special instructions which had to be manually placed on the map.

This certainly would be a most welcomed asset. To make up a route map we, before advent of this piece of equipment, were required to mark latitudes and longitudes on the map depicting the desired points to over fly, and draw a continuous line of flight from one set of coordinates to the next set. A great deal of time was required to accomplish this task when considering the distance the aircraft would travel while traveling at Mach 3 speeds.

Maps were annotated to depict aircraft desired headings, identify visual check points which allowed Pilots to ensure route adherence, emergency airfields, camera and electronic equipment on and off locations, estimated times of arrival to the next check point, emergency airfields, fuel data, radio frequencies etc. As always, these map annotations were constantly upgraded based upon Pilot desires as they continued to fly training sorties. Once the maps were completed, they were photographed, cut to fit the cardboard frames (for placement in the cockpit container), the film strip was then placed in a cassette used to brief the pilots and then placed into the aircraft console when airborne, and viewed by the Pilot to maintain course. I might add that this map development was a constantly reviewed and upgraded activity until a general consensus, by the Pilots, said that's it.

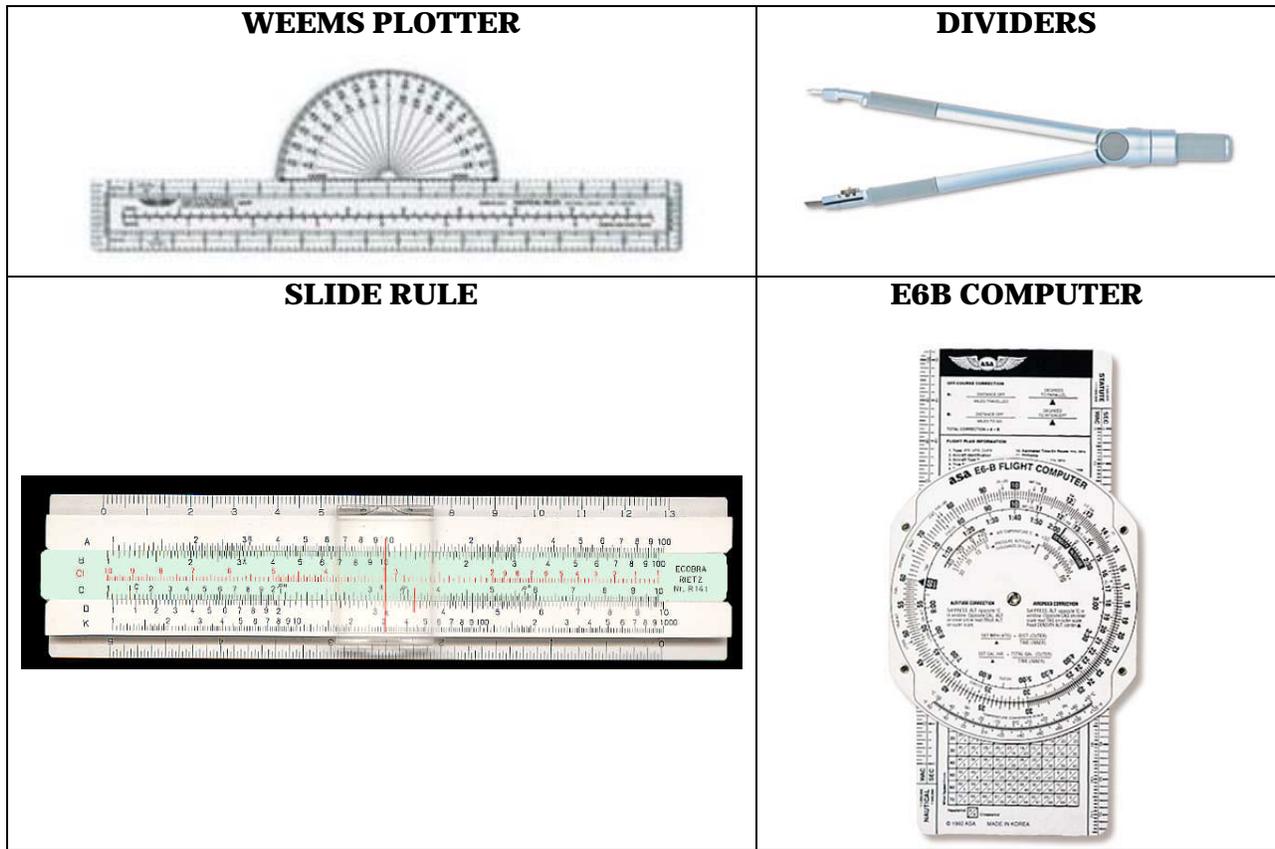
Also was the need to place two lines on map, each equal distance from and parallel to the flight path. These two lines would define the area where the map would be photographed, then cut and placed in a metal container located in the cockpit as an emergency map backup if the console display, which the Pilot viewed to maintain course, failed.

All of the above planned mission planning techniques went up in smoke as the Electronic Map Preparation unit failed to perform at which time we removed it, and our crew had to now lay out the map by hand then take the steps depicted above to satisfy mission requirements.

The age of computers had not as yet arrived on the scene, and our planning tools consisted of hand a held set of dividers for measuring distance, a weems plastic plotter used to determine course, a hand held plastic computer (E6B) used to determine time as it related to arrival at check points etc, flight headings, and fuel consumption etc. One of our Mission Planners, Bill Corbin, who was a genius with computations used the old standby, the slide rule. Needless to

say, this change to manual mission planning certainly extended the time required to plan a mission, considering a mission could be in the thousands of miles.

MISSION PLANNERS EQUIPMENT



One of the tools we designed and utilized in Mission Planning was a piece of plastic, approximately three feet long and twelve inches wide. It had a slit cut lengthwise down the middle which was placed over the planned route. It also had two slits on each outer side of the flight path slit. One slit was to identify the area for photographing, and the other identified where the map was to be cut for placement on the cardboard cutouts which were stored in the cockpit container. A marker was used to draw lines in those slits to identify where photo and map trimming actions were to be taken. Use of this item was a real time saver.

I might add that close cooperation was conducted with the Pilots to insure that their desires were incorporated into our efforts. Many changes were made based upon Pilot desires. It should be noted that this aircraft did NOT have a radar navigational system, it utilized the Honeywell INS system (Inertia Navigational System) and I think it did a good job. Visual check points normally seen by crew members flying at 600 mph at 40,000 feet were no longer valid when flying at 2100 mph at 90,000 feet. The aircraft was equipped with a Baird Electronic viewfinder which provided the Pilot with the ability to visually view the ground directly under and to the right or left of the aircraft. Pilot input on what was valid check points was always our guidelines in laying out map data.

All training routes were planned by our Group, and close coordination with CIA Hdqrs was on going, keeping them in the loop. We did have occasional visits to CIA Hdqrs, and they in turn did likewise by dropping in on us from time to time.

The Air Refueling support was provided by a squadron of modified KC-135 aerial tankers stationed at Beale AFB in California. Their fuel tanks had to be modified to handle the JP 7 fuel in lieu of the standard JP 4 fuel used by the Air Force. The JP7 fuel was designed specifically to be used at very high speeds as it had a safer flash point. You could throw a match in it, and nothing would happen. Special igniters were required in its use. We worked very close with the Squadron's staff in establishing air refueling areas throughout the U.S. Security, i.e. staying away from normal civilian air traffic routes was paramount, especially during descent and climb out portions of the refueling.

Normal mission planning briefings were held on a one to one basis. After a general briefing was concluded the A-12 pilot and a member of our staff would proceed to a small room where we had a projector and the route to be flown was briefed and any questions by the Pilots was hopefully answered.

One of the projects levied upon us was to contact the Agency that made maps for the Government and have a map constructed that could be destroyed, in flight, if a bail out were to occur. I made two trips to this facility in St Louis, and on the second one, they showed me a map segment that they immersed in a pan containing a black fluid. The map was completely destroyed. I passed this info on to Lockheed and when the unit deployed to Kadena, the maps, which were never used stateside, were used on operational missions. I understand that plain water was to be used, to destroy the maps in lieu of the black fluid originally used during the demonstration. To my knowledge, the explosive mechanism Lockheed designed was never used in flight.

On occasion, at debriefings, our Mission Planners would learn of a problem or suggestion from the Pilots, and, if appropriate, this information would be passed on to Lockheed. This was the case in changing out the mechanism that controlled the view finder. It resulted in the change from a panel of switches to that of a wafer switch which was much easier to operate than turning toggle switches off and on. Al Rossetti gets credit for that one.

A debriefing was conducted after every training flight to see if there were areas that we needed to review and or change. In looking at an annotated map made at the beginning of operations versus one utilized when the Unit shut down in 1968, it's obvious that there was much change from that at the start.

I did not have the honor and privilege to accompany the Unit to Okinawa, however I can without hesitation state that the close cooperation between the A-12 Pilots and our Staff certainly was a factor in the Unit having a successful Operation flying out of Kadena. Those efforts, which were passed on to the SR-71 Operations, which replaced the A-12, certainly contributed greatly to the success of that program. I was one of the lucky few who were privileged to have served in both programs.