it is unique because it's the space mission I mean there's only one place that they do this out of and that's over here and we happen to be fortunate enough to be located right next to the Kennedy Space Center to be able to take part in this personally a lot of folks don't even know we exist during a shuttle mission it's unlike anything that I've ever done before I've been doing it many many years now and it's a joy to do and we just love doing it the Space Shuttle depends on an extensive supporting cast to safely get
off the launch pad and into space and
then return safely to earth but if
something goes wrong and astronauts have
to bail out of the shuttle there's
another team of professionals standing
by to rescue you know if we go to work
you know somebody's having a really bad
day so sometimes we like it to be boring
but we're always prepared for the
what-if scenario these professionals are
part of the Air Force Reserves nine 20th
rescue a based at Patrick Air Force Base
in Florida just a few miles south of
NASA's Kennedy Space Center their tools
are helicopters and airplanes carrying specialized gear to allow them to cool distressed astronauts out of a swap away from the launch pad or rescue them miles out in the ocean the teams have not been needed for a real emergency during the Space Shuttle era but that does not keep them from taking their mission seriously we're excited to be a part of the mission but we really hope that they don't have to use us you know we're as prepared as we could possibly be we're eager to get out and do the mission but if if somebody has to use us that means
something went wrong but the good thing

is is that we are there we're ready and

we're completely prepared the rescuers

are equipped with everything from first

aid supplies to defibrillators inside

the helicopters they also have

specialized medical packs to take with

them to stabilize a patient the biggest

unique challenge is probably how we

configure the aircraft for this

specifically for the shuttle rescue

mission

we take equipment out and take out our

fuel tanks we take out the the seat for

the gunner we put in boxes that are
provided to us by NASA we put in more medical equipment than we normally take in combat the equipment list also includes night-vision goggles and sensors for the aircrew and aircraft so they can find astronauts in the dark but perhaps those specialized equipment is the pilots air crew and pararescuemen themselves trained to rescue downed Airmen behind enemy lines the teams use many of the same skills and operate with same urgency to recover astronauts in an emergency like all the Armed Forces Special Operations Forces the pjs has
the pararescuemen go through demanding training to test their mental toughness every bit as hard as their physical abilities some of the 3-year training cycle is performed alongside Army Special Forces soldiers and Navy SEALs along with NASA at Kennedy Space Center's launch pad 39a they know how a rescue would go because of extensive practice for several rescue emergency situations when we do an open ocean rescue that's called a mode eight we have seven other modes that start at the pad working away after that's more more
or less where we perform a medevac role

then there's most sixes on the runway

mode 7 which in terms of a real crisis

situation can be a real problem given

that a lot of the area around NASA is swamped and the orbiter has a lot of poisonous hypergolic and other chemicals

a full-scale ocean rescue dress rehearsal

incorporates NASA's own booster recovery

ships and helicopters Navy vessels and Coast Guard aircraft

over the years we would do the bow

training with NASA specifically once

every six months we do a land or order
based trainer specifically with an excess exercise and what we do for normal training for SAR is over water we do over water training weekly NASA has a way of when they're doing that when they're preparing for missions and they're asking for our help and training that they set up some very interesting scenarios for us to deal with some of them have been where they would put the shuttle cockpit mock-up in a swamp and we would have to deal with that hoisting astronauts from the ocean it's quite a bit different from picking up stranded voters the
comparison is that an astronaut you know they wear those big orange suits

unfortunately if they go in the water they fill up with water and that turns a 200-pound individual into a 300 to 350 pound individual and that makes it extremely extremely difficult to bring them up into the cabin of the helicopter during the rescue operation we've got PJs on board and a combat rescue officer we also carry three of their Rams packages which we can to play out the back of the aircraft and what we'll do is we'll deploy that package and then
the PJs will follow outside right after

that and then they'll land in

there their boats and then they'll try

and find take the boats to the

astronauts that we've already spotted we

do a lot of OJT just to get ourselves to

the point that we can go out and

successfully prosecute within the time

frame that the astronauts expect us to

we practice that on a regular basis it's

just now we're taking that skill set and

applying it to the shuttle mission

helicopters are the preferred method for

lifting after opt out of danger because
they can hover over a person and

basically act like a crane in the sky

known by their call sign Jolly rescue

helicopters have been greeted

enthusiastically by downed pilots

stranded boaters and even hurricane

survivors there are times though when

rough seas or other conditions make a

simple hover very difficult sometimes

the pilot has to chase the person if

they bob up and down on large ocean

waves all I'm doing is I'm flying a

helicopter at listening to the engineer

who has to tell me how to fly the
helicopter while he's trying to pick

00:05:54,220 --> 00:05:57,490
this guy up out of the water on the

00:05:55,389 --> 00:06:00,159
hoist and not bang him into anything

00:05:57,490 --> 00:06:03,009
the helicopters also perform range

00:06:00,160 --> 00:06:05,080
clearing tasks off shore it's up to the

00:06:03,009 --> 00:06:06,759
pilots and aircrew to go out and make

00:06:05,079 --> 00:06:08,709
contact with the offending vessel

00:06:06,759 --> 00:06:12,269
whether it's a wayward pleasure boater

00:06:08,709 --> 00:06:15,669
or a cargo ship with a foreign crew

00:06:12,269 --> 00:06:18,009
there's been some really dark scary

00:06:15,670 --> 00:06:20,230
nights kneeling with ships and there's

00:06:18,009 --> 00:06:22,029
been some fishing tournament days I

00:06:20,230 --> 00:06:23,950
guess you'd call them generally speaking

00:06:22,029 --> 00:06:26,529
where you're out there and you're like

00:06:23,949 --> 00:06:28,750
you're like a bouncer at a really big
concert trying to keep all the boats out

of the way so it's fun to communicate

with vessels that that aren't on a

marine band or are you you have to

resort to dropping written messages down

or or you know getting alone enough to

be able to try and communicate hand

signals with them NASA and the Air Force

Reserve can also employ up to three

c-130 transport aircraft for shuttle

launch and landing alerts the c-130s

using the callsign king carry

pararescueman

a host of supplies that can be
parachuted to the ocean surface markers

for recording locations and perhaps the

most critical element for an ocean

rescue fuel the c-130s are equipped with

drugs that allow them to refuel

helicopters in the air

we may be out there for hours looking

for astronaut that hasn't been located

or is incommunicado since the shuttle

rescue would require substantial

coordination all the crews learn

something in common with NASA's launch

team an ability to listen and understand

several conversations at the same time I
can be listening to five different

radios at the time now we do share that

within the helicopter with you know

we're share between two pilots and them

even the fe and the gunner in the back

we've got like 10 different inputs 20
different conversations going on all at

once and I've got to pick out a little

bits and pieces of information that that

my airplane needs or the airplane next
to me or the guy in the back running

running this show is the air boss I've
got to put all that stuff together so

everybody can get a good picture of
what's going on outside the airplane the

00:08:06,459 --> 00:08:11,348
Air Force's space rescue operations did

00:08:08,949 --> 00:08:14,288
not begin with the space shuttle units

00:08:11,348 --> 00:08:16,810
were used or on call for all of NASA's

00:08:14,288 --> 00:08:19,209
manned space programs after all before

00:08:16,810 --> 00:08:21,579
shuttle the Mercury Gemini and Apollo

00:08:19,209 --> 00:08:24,098
astronauts counted on landing in the

00:08:21,579 --> 00:08:26,528
ocean to end their missions and they

00:08:24,098 --> 00:08:29,348
counted on ships and helicopters to reel

00:08:26,528 --> 00:08:31,750
them in safely but the mission itself

00:08:29,348 --> 00:08:34,389
how we execute it how we do it it's not

00:08:31,750 --> 00:08:36,339
really changed but it's the visibility

00:08:34,389 --> 00:08:39,278
has changed over the years we bring home

00:08:36,339 --> 00:08:42,159
a a son a daughter a dad or a mother

00:08:39,278 --> 00:08:44,168
when you rescue somebody and you're
saving a life we're in the peacetime

rescue world that's outstanding and

that's what we do in rescue is hopefully

you know we don't have to do what

we're trained to do but we train

tirelessly all the time

to be ready